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COMMERCE OF THE TWENTIETH CENTURY.

At the first annual banquet of the Post D., Travelers' Protective Association, held at Davenport, Iowa, the first and principal speaker of the evening was Col. James R. Nutting, who discussed "American Commerce of the Twentieth Century." In the course of his interesting address Col. Nutting said in part:

As a basis for our faith in the future rapid growth of commerce in this, our much beloved country, we take the figures of the Secretary of the Treasury, Mr. Gage, in his report of the fiscal year ending June 30, 1900, in which he shows that, from the very small amount of business transacted at the commencement of the nineteenth century our total exports have increased until in the year 1900 they were $1,394,000,000, of which amount there was $433,851,000 worth of merchandise manufactured by us. Our imports for the same period were $849,141,000, or a balance of trade in our favor in one year of $544,541,000. From these figures it is not difficult to imagine what the magnitude of American commerce may be before the close of the twentieth century.

During the first quarter of this century a canal will be constructed from LeClaire to East Davenport for the accommodation of boats, and will furnish water power for manufacturing purposes that will make Davenport the Lowell of the middle west. The Illinois and the Mississippi, familiarly known as the Hennepin canal, will be completed, giving Davenport water communication via the Great Lakes, Erie canal and St. Lawrence river, with the sea at New York and Quebec. A canal will be constructed from Lake Michigan to Lake Erie, and also from Lake Erie to the Ohio river at Pittsburg, which will give us a short water route to the great iron manufacturing centers of the United States. There will be a water route established between Duluth, on Lake Superior, and St. Paul, on the Mississippi river. The Chicago drainage canal will be merged into and will become a part of a ship canal via the Illinois and Mississippi rivers from Lake Michigan to the Gulf of Mexico. The Nicaragua canal will connect the waters of the Pacific and Atlantic oceans. A ferry will be established between San Francisco and our new possessions in the Pacific, the Sandwich Islands and the Philippines. San Francisco and either Galveston or Port Arthur will become as important cities to the West and South as New York is to the East.

The railway cars and coaches will be built of aluminum, their form will be cigar-shaped. The lumbering old heavy weight coaches and cars running up and down steep grades on heavy rails and solid road beds, around sharp curves, frequently reversed, will be replaced with light airy carriages, hanging from over head tracks, with very light grades, and no short curves. These trains will be moved by electricity instead of steam, and with greater frequency, furnishing much better service than at present. Short haul local freight will be carried on trolly cars, making connections with every town, hamlet and city, will receive and deposit freight at warehouses and store doors. These changes will also infuse new life into small enterprises, encourage the large mass or middle class of people to greater individuel efforts, restore the small operator in whatever line he may have chosen, to a place among commercial men, and enable him to again successfully cope with his wealthy competitors.

The consular service of the United States will be much improved when our consuls to the foreigns lands are selected, as they must be sooner or later, from your ranks. When this is accomplished American commerce will extend to every country on this globe. The products of our farms, mines and manufactories will be carried over every sea in ships, built in our ship-yards, owned and officered by American seamen. From every port where our vessels touch, there will be railroads, constructed by our capital, enterprise and enery, and our locomotives, manned by American engineers, will transport these enormous commercial railway trains over steel rails and steel bridges, manufactured by us, into every nook and corner of our own and every foreign land.

ANOTHER POLAR EXPEDITION.

Capt. J. E. Bernier, of Quebec, who has voluntered to make a voyage of discovery to the North Pole by a new route, and by the aid of inventions of his own for ice traveling, has completed his arrangements in England and sails for Canada in a few days to submit his ideas to Sir Wilfred Laurier.

"My plan," he said, "is to start via Bering Straits, follow the coast of Siberia, and then push north as far as the ice will permit. If the ship attains a better position than the Jeanette, I expect to reach the pole and return within three or four years.

"My plans include not only reaching the pole, but scientific observations not heretofore completely achieved. The ship is an improved Fram, and includes all the best and latest devices of the Antartic vessels now building. Twelve or fourteen men will accompany me. I attach the greatest value to the Marconi system for communicating with my base."

FOREIGN NOTES.

THE thirteenth annual Shipping Review issued by John White rather inclines to the belief that Britain has overproduced tonnage of late years and that it may be found necessary to keep the supply with the demand, along with this may be taken a statement concerning the growth of tonnage on Lloyd's Register. The total thereon in 1899 was 11,859,581 tons of steamers and 2,410,282 tons of sailing ships. This is an increase of over double the total of steamers in 1890; quadruple that in 1880; and ten times that of 1870. A further interesting statement in the review deals with the subsidies paid by various foreign governments to their mercantile marine. Germany disburses for this purpose £235,000 per annum; France, navigation bounty, £496-880, and shipbuilding bounty £294,356; Italy, shipbuilding bounty in 1898, £400,000, and this is expected to run up to £1,000,000, in addition to a navigation bounty according to mileage; America, £200,000, not mentioning the nine million subsidy bill as now proposed. One reference made by Mr. White is scarcely accurate. Dealing with the importation of steel ship plates from America, he says, "American exporters have reduced the cost of sending their manufactured material here by shipping such in shallow draught steamers by way of the Great Lakes and across to this country."

GERMAN shipping has increased by some 25½ per cent. during the last two years. To a great extent this increase in the German industry has been accomplished directly and indirectly through the Hamburg-American Line, who took the lead and showed the other German lines and "tramp" owners that foresight and enterprise were the qualities required to make progress and earn success. On Jan. 1, 1898, Hamburg owned 378 steamers with 515,826 tons net register; and on Jan. 1 of this year 486 steamers with 748,435 tons net register. The fleet of sailing ships had during the same period increased from 293 with 197,621 tons net register to 307 ships with 240,419 tons net. This is now going to be increased by a new craft intended to beat the record for size set by the Potosi, belonging to Ferd. Laeisz, of Hamburg. The new wonder will be built as a five-master at the yard of Mr. Joh. C. Tecklenborg, Geestemunde, the builder of the Potosi, and will be owned by Mr. Laeisz. She will be 400 feet long, 53½ feet beam and 33 feet 7½ in. depth, with a carrying capacity of 8,200 tons or about 2,000 tons more than the Potosi.

TRAINING FOR SEAMEN.

The Navy may congratulate itself upon the prospect of having a training ship for Annapolis constructed on lines suggested by Superintendent Wainwright of the Naval Academy. The drilling of the cadets for the duties of their profession cannot be properly carried out without a long and careful course of drills in seamanship, deck duty under sail, the command of men under the varying vicissitudes of weather; in fact, under the conditions of actual service, requiring quick thinking, good judgment, and experience in the thousand and one items in the life of a seafaring man. It is to be hoped, says the Army and Navy Journal, that our naval authorities will be brought to the same conclusion as our cousins across the Atlantic in this important matter. In the English Navy it is laid down as an axiom, and acted on, that no man can properly command men until he has gone through a course of drill and exercise on the decks of a sailing ship, and for this reason the sailing ship drills are kept to the fore as in the olden time, the drills and habits of command being held as being absolutely necessary for the successful naval officer. This applies with equal force to the enlisted personnel of the Navy, and it is held that without the experience gained on the decks of a sailing ship no man can be a good sailor.

It is the declared intention of the Bureau of Navigation to provide ships for drilling and educating the "rank and file" of the service in the things wherein lies the true strength of the Navy. The habits of obedience, of preparedness for sudden emergencies, the ability to act for himself in a pinch, all come to the man who has been drilled to his profession without the aid of steam. Of course, this applies only to those men who perform the duties of their profession on deck entirely, and will not be the case with those of the enlisted force who have the duties of firemen and many other responsible positions in the little world called the Navy.

It is hoped that Commander Wainwright may be able to carry into effect his excellent ideas in the matter of a training ship for the use of the Naval Academy, and if the various Bureaus of the Navy Department will pull together in this matter there can be no doubt of the success of the undertaking. With the equipment of a sailing ship for drilling the enlisted men of the service it is likely that enlistments will show an increase, for there can be no doubt that the profession of a sailor pure and simple is the most fascinating life a young man can turn his mind to, and in these days of the steam tramp it is refreshing to turn to "A life on the ocean wave, a home on the rolling deep," in the sense of the sailors of the olden time.

It is safe to say that Mr. Dayton, the efficient Chairman of the House Naval Committee will be the last one to interpose objections to the idea of increasing the efficiency of the Navy, so it may be regarded as certain that a favorable report will be made on the proposed construction of a training ship for the Naval Academy, to be provided with sails and auxiliary steam power. The armament will, of course be of the most modern type, and the cruising ground of the vessel will probably be far enough afield to insure the sea experience contemplated in her construction.

The foregoing is, of course, all right enough, but the next training ship to be put in commission ought to have something to train on. In the case of the much talked of and written about U. S. training ship Chesapeake, she carries nothing but plain snug canvas, instead of being fitted out with fidded royal masts, carrying sky-sails and moon-sails, with every ounce of blocks and gear for a complete outfit of studding sails, etc. To become agile, self reliant and circumspect there is nothing like keeping the novices branched aloft, working with one hand for their ship and one for their lives and at times hanging on by the "skin of their teeth" or the hair of their eyebrows.

CLEVELAND.

Special Correspondence to The Marine Record.

The Welland canal steamer building for W. A. Hawgood and others of this city, will be launched at Toledo Thursday.

Messrs. J. J. Lynn and Dan Lynn, of Port Huron, and Capts. Cyrus Sinclair, of Chicago, and Alex. Sinclair of Duluth, were in the city Tuesday.

The engineers will make an effort to get more help in the engine room on steamers having water tube or pipe boilers, as they are more commonly called. The men say that they will not make any demand but will take the matter up with the owners. There are not many steamers on the lakes that have water tube boilers.

Capt. Richard Barrow, a pioneer lake captain, died at his home, 115 Harbor street, Monday evening, of a complication of diseases. He was born in London, Eng., 78 years ago, and came to Cleveland 69 years ago. For about three years he and his father were engaged in fishing and trading with the Indians on Thunder Bay Islands. Then he became a sailor and followed the lakes until his retirement, about 20 years ago. Capt. Barrow started the first passenger line between Port Stanley and Cleveland, using the little steamer Telegraph. He had been a member of the Odd Fellows for 53 years. Three sons, Richard, William and Arthur Barrow, all of Cleveland, survive him.

Mr. J. C. Gilchrist has this week bought the steamer Neshoto from Mr. Robert R. Rhodes. The price was not given out. The Neshoto, which is laid up here, is in good shape. She was built for Mr. Rhodes, by Quayle & Sons of this city, in 1889 She is 284 feet keel, 42½ beam and 22 feet deep. Mr. Gilchrist now has twenty-seven wooden vessel and has eight steel steamers building. Mr. Rhodes has disposed of all his wooden boats. He has the steel steamers Yale, Minneapolis, St. Paul, Huron and William Castle Rhodes, all of which are A1 modern steel cargo steamers of large capacity. In all times past, and at the present, the Rhodes fleet is one of the best found, that is, kept up, well looked after and taken care of from end to end and keel to trucks that there is on the lakes.

Although vessel owners protested vigorously against laying off bridge crews during the winter months and last Monday evening a resolution was introduced at the council requesting the employment of enough men to swing the draws, Mayor Farley declared that it didn't make any difference—the bridges won't be operated by any more men than it has been customary to employ during the winter. Well, this is all that is asked, as long as the bridges are opened when called upon, vessels can ask nothing more. Mayor Farley is too good a friend to Cleveland to think of hampering its waterborne traffic one iota; on the other hand, he does not care to see a useless expenditure, or furnish sinecure positions for political hangers-on. It is safe to say that when the harbormaster is notified of the desire to move any vessel, men will be found to attend the bridges until the free opening of navigation again.

The suit of the owners of the steamer Aurania for $8,000 damages against the owners of the steamers Masaba and Edward Smith No. 2, resulting from a collision in the St. Clair river two years ago, was decided in the United States district court on Saturday. Judge Ricks' opinion follows: The officers and crew of the Edward Smith No. 2 were in fault in not properly navigating their vessel and not anticipating the sheer, which might have been avoided, or the force of which might have been greatly lessened by a prompt handling of the wheel and proper signals to the engineer. The fault of the Masaba lay in undertaking to pass the Smith at that unfavorable place, which undoubtedly contributed to, if it did not wholly cause the sheer of the Smith, as aforesaid. In the conclusions reached as to the facts, it is not necessary to discuss the legal propositions submitted and argued by proctors for both the Smith and the Masaba. I have so stated them that full advantage can be taken if any error has been made. A decree may, therefore, be drawn in favor of the libelants, awarding them costs and all court expenses, and finding both the Smith and the Masaba in fault for the reasons heretofore stated, and dividing the damages between them. The case may be referred to H. F. Carleton, as commissioner, for the assessment of damages.

Cleveland launchmen are considerably annoyed by the report that Congressman Grosvenor, of Ohio, has introduced a bill in the house requiring that owners of launches shall be compelled to employ licensed pilots and engineers. There are about fifty launches in the Cleveland harbor, and the owners all say that if the bill goes through, they might as well quit launching for pleasure. Mr. L. A. Kelly, who is a member of the Cleveland Yacht Club, is the owner of a nineteen-foot launch, which, he says, will be of no use to him if the bill becomes a law. "The requirements of the bill are all right for large launches which are intended for passenger carrying. But, it is out of the question for owners of such launches as the majority of those in the Cleveland harbor to hire licensed men to run them. A boy can learn to run one of them with safety in ten minutes, and for piloting, we never go out of reach of shore and there is no necessity for a licensed man. Launches that are not used over two or three times a month don't require a crew of that kind." Mr. R. A. Landreth, secretary of the Cleveland Yacht Club, stated that he did not see the need of having licensed engineers on small launches, but that he considered it a good idea to compel the owners to pass an examination on the rules of the road. "A great many of the owners of launches don't know how to pass other boats in the river, and some day they are going to get into trouble. If they were required to pass an examination on piloting it would be a good thing." It is said that a meeting of the launch owners may be called, and a formal request sent to Congressmen Burton and Phillips to oppose the bill.

BUFFALO.

Special Correspondence to the Marine Record.

It is now reported that Capt. M. M. Drake will take over the management of the Lackawanna, Green Bay Line next season, and that besides the Russia and Cuba another high powered speedy boat will be added to the service, but where she is to come from nobody here seems to know.

The work of reconstructing the dock of the Union Iron Works, which collapsed several weeks ago with a large quantity of iron ore, has begun. The new dock will be backed by a solid foundation laid in cribs which are now being built. The four wrecked Brown hoists are also being rebuilt.

Commander Dunlap, U. S. N., stationed at Buffalo, in the tenth lighthouse district, last Friday received authority to place as many spar buoys in the western channel of the Niagara river as are necessary. The buoys will be in place by the time navigation opens in the spring. There had been complaints that the channel did not have sufficient buoys or targets. If spar buoys should prove inadequate, Commander Dunlap has authority to use targets.

The consolidated shipyards at Buffalo now give employment to about 1,500 men. Work on the new steamer Mauch Chunk is progressing rapidly and it is expected she will be ready to launch in July. At the Union yard keel blocks have been set for a new passenger steamer. The steamer Bulgaria, which was damaged by fire several weeks ago, is being thoroughly repaired. The steamer R. L. Fryer is being provided with a third deck at rail height. The wooden coverings are being removed from the steel decks of the Lehigh Valley Liners Saranac and Tuscarora. The Western Transit steamer Buffalo is in drydock for some new plates and the Commodore of the same line for large repairs. The steamer John F. Eddy will be given a new keel and many new bottom planks, and the barge F. B. Gardiner new rail and other repairs. New Scotch type boilers, two each, are to be placed in the steamers Clyde and W. H. Gratwick.

The Licensed Tugmen's Protective Association, which has upward of 2,000 members in the different harbors of the Great Lakes, opened its second annual convention at Buffalo on Monday. Fifty-eight delegates from the twenty-two ports along the lakes answered the roll call. The grand president is Michael Ryan of Duluth. The other officers are: First vice-president, Capt. G. H. Vroman, Buffalo; second vice-president, Capt. H. G. Coulter, Cleveland; third vice-president, Capt. Wm. Smith, Chicago. Elma E. Hand of Conneaut, formerly of Buffalo, is grand secretary and treasurer. President W. J. Whelan of the local lodge, No. 4, and President T. V. O'Connor of the Buffalo Harbor Tug Pilots' Association, which is affiliated with the central organization, extended the visitors a cordial welcome. The members of the Grand Lodge established headquarters at the Mansion house. The Licensed Tugmen's Protective Association was organized in Chicago on Jan. 20, 1900, at a convention attended by fourteen delegates, representing seven lodges and something less than 500 members. During the past year its membership has quadrupled.

DULUTH—SUPERIOR.

Special Correspondence to The Marine Record.

Sales of lumber in Duluth to the amount of 4,600,000 feet were reported this week. The Red Cliff Lumber Company sold 4,000,000 of high grade lumber to go forward after the opening of navigation. G. A. Potter sold 600,000 feet of lumber to go to Chicago. It is expected this market will be more active from now on, than during the earlier part of the winter.

The Lehigh Valley Coal Co. will discontinue entirely the shipping of hard coal from its dock in Superior. One dock in Duluth also has been compelled to stop shipping hard coal for the season. This is the Boston Coal Dock and Wharf Co. The hard coal supply is meager. The supply is distributed among the different docks but some will no doubt run short before the cold weather is over. Some shipping will be done but not much and the city will just be able to be taken care of with what is left. A local coal dealer stated that he apprehended no coal famine at the head of the lakes. He said, however, that if it were not for the fact that coal is now being shipped into the Twin Cities by rail and the country trade being supplied from there to a great extent, Superior and likely Duluth would suffer.

CHICAGO.

Special Correspondence to The Marine Record.

Circulars are out announcing that Mr. R. J. Dunham has become identified with the well-known firm of C. W. Elphicke & Co.

The Hanley Construction Co., of Quincy, Mass., signed a contract to build a yacht for the Chicago Yacht Club to defend the Canada cup in the races the coming summer. She will be a 30-foot center-board and a true type of the Genesee, which took the Canadian cup two years ago, when she sailed under the colors of the Rochester Yacht Club. The boat will be launched about May 1.

William E. Fitzgerald, manager of the Milwaukee fleet of syndicate steamers has unshipped a few of his masters and engineers, discharged transferred and shuffled them around. There are now a few vacancies which he will be in no hurry to fill as there is a small army of applicants for each position. There are so many holding lake licenses now that you could pave H—— a mile with them, the licenses, I mean, not the holders thereof.

Capt. Jeremiah Harrington, one of the pioneer vessel captains on the Great Lakes, died Monday at the home of his daughter in Chicago, aged nearly ninety years. He had retained his faculties perfectly, although in the past year he had been badly crippled with rheumatism and a sufferer from many ailments. Capt. Harrington has made Chicago his home port in the years of his prime, and had many interesting tales to tell of the early days of the city,

Commodore W. H. Wolf, the veteran Milwaukee vesselman, who is well known all along the lakes, was taken to a hospital in Milwaukee a few days ago for the amputation of one of his legs. Commodore Wolf has been suffering for some time with blood poisoning and the operation was necessary to save his life. The commodore is seventy years of age and has been identified in marine circles for nearly a half century. He was partner of the Wolf & Davidson Ship Building Co.

The outfit of the Green Dredging Co. at Chicago was sold this week to the Lydon & Drews Co. for $80,000. The property included three large tugs, three dredges, ten scows and five piledrivers. The shop of the company on Goose Island is also included. This makes the Lyon & Drews Co. the largest dredging contractors on the lakes. The Green Co. is the third concern that has been bought out by them in three years, the other plants purchased being those of the Chicago Star Construction Co. and of the McMahon & Montgomery Co. The Green Dredging Co. has been in business in Chicago for forty years. Its withdrawl leaves but one competitor to Lydon & Drews in the Chicago river, the Fitzsimons & Cornell Co.

A steel steamer of large size will in all probability take the place of the wooden steamers Helena and Neosho, recently sold to J. C. Gilchrist, of Cleveland, before Oct. 1 next. Manager Meyer, of the Milwankee tug boat line states that the American Ship Building Co. will have a vacant berth at the West Superior yard to insure the delivery of the craft early in September, but before letting a contract he proposes to visit Port Huron and Toledo for the purpose of ascertaining the situation at the shipyards there with reference to new work and entertaining propositions. The new steamer will be of 5,000 tons carrying capacity, or about the same size as those now in course of construction for J. C. Gilchrist. Mr. Meyer agrees with Mr. Gilchrist in the conclusion that 5,000-ton vessels mark the limit for general utility.

The Graham & Morton propeller Louisville burned to the water's edge at Benton Harbor last Friday morning. Charles Southworth, the watchman, single, aged 26, whose home was at Saugatuck, lost his life. When the fire was discovered by outside parties the pumps on the vessel were working showing that watchman Southworth had been fighting the fire when he met death. It is supposed he was first overcome by smoke and then burned. The Louisville had been repainted, her machinery inspected and the vessel would have made the first spring run in two weeks. The boat was built at Saugatuck in 1889, and was known as the propeller Reid. She was rebuilt in 1895 and since that time has borne the name of the Louisville. She was 177 feet long had a 26 foot beam, was rated A1 and valued at $100,000. The loss is fully covered by insurance. The vessel burned at the identical spot where the steamer Mary took fire a year ago. Nelson J. Newland, aged 78 years, father of W. G. Newland, president of the Benton Transit boat line, while watching the destruction of the Louisville dropped dead.

The lake and ocean freighter Northman was successfully launched on Saturday last from the yards of the Chicago Ship Building Co. at South Chicago. The christening and launching was done without much ceremony but many people gathered in the yards to watch the 1,000 tons of steel slide down the skids and take its initial plunge into the water. The new vessel is not one of the largest built at the yards, but she was constructed specially for lake and Atlantic travel, and will be one of the fleet to take cargoes from Chicago to foreign ports. The Northwestern Steamship Co. will take posession of the vessel as soon as rigged. She is 256 feet over all and built to carry either grain or general cargo. The trial trip of the Northman will be made as soon as navigation is open. A large party will take passage on the boat to the Atlantic seaboard. The launch was one of importance to local marine men, who are much interested in the project of direct shipping to foreign ports. The head of the American Ship Building Co., W. L. Brown Esq., is a

strong believer in the St. Lawrence route to the coast and the immense volume of trade which will soon be sweeping along in that direction. The western states still remain a virgin field and the products for export are inexhaustible.

PORT HURON.

Special Correspondence to The Marine Record.

J. A. Southgate and Wilbur Boynton, local members of the M. E. B. A., are attending the annual convention held in Cleveland this week.

At the close of the annual meeting of the Lake Carriers' Association, Capt. Geo. Tebo, of Chicago, visited here for a few days, as is his usual custom.

The steamer J. E. Mills, Capt. T. A. Eller, this week towed the Argonaut from Black river to the Dunford & Alverson dry dock and the Havana to Miller & Son's dock.

Capt. Harry Warwick is here on his annual trip in the interest of his firm. Capt. Harry is a very shrewd salesman; he has an art of reaching about all classes of people in his line.

J. R. Sinclair and wife, C. H. Sinclair and wife, of Chicago, and Alex. R. Sinclair and wife, of Duluth, arrived in Port Huron last week and attended a family re-union at the residence of Daniel Sinclair on Military street. All of the Sinclair boys were once residents of Port Huron.

The 300 captains, masters, pilots and engineers, who are spending the winter in Port Huron, daily congregate at their respective rooms and discuss matters of interest to their particular branch of business. The captains are at present arranging for their party, which will be held at the armory on January 31.

Congressman Weeks writes from Washington that he finds there is a sufficient balance left from a previous appropriation to complete the channel in Black river from the Grand Trunk railroad bridge to the mouth. The channels in this vicinity are all provided for in the river and harbor bill now before the Senate.

Cars on the Grand Trunk are becoming more plentiful and a large amount of grain is being daily shipped from Port Huron elevators to Eastern points. There is piled up on the docks on St. Clair river between Court and Griswold street, one million and a half feet of lumber which will be shipped as soon as the necessary cars can be obtained.

The annual party of the Marine Engineers was held at the Guards' armory on Military street last Thursday evening. Two hundred and fifty couples were in attendance, including a number of out-of-town people. The large hall was handsomely decorated with flags and bunting and pictures of the members of the local lodge and the national chief engineer. A handsome M. E. B. A. emblem of electric lights attracted considerable attention. The music was furnished by the City orchestra and was excellent. The 22 dances on the program, including an engineer's cakewalk. The supper was served by Breeze. The party was an elaborate one and a complete success.

Messrs. Meyers and Slosser, of the Milwaukee tug line, paid a visit here a few days ago for the purpose of negotiating with the Jenks Ship Building Co. for the building of a 5,000-ton steel cargo steamer. The two gentlemen spent the afternoon at the shipyard and looked over the capacity and equipment of the place. It is understood that they will also inspect the yards of the Craig Ship Building Co., Toledo; then, I suppose, figures will be in order for the new contract. Much has to be said in favor of the last steel boat turned out by the Jenks Ship Building Co. to the order of the Wilson Transit Co., Cleveland; both owners and builders are well pleased with the big boat in every respect, and she is a great carrier, also steaming well on an economical basis of fuel.

DETROIT.

Special Correspondence to the Marine Record.

Cheesbrough Bros. of this port are said to have purchased one of the steel steamers now in course of construction at the yards of the Jenks Ship Building Company, in Port Huron.

Capt. W. F. McGregor, of the steamer Mary H. Boyce, has accepted the superintendency of the Grand Trunk car ferries which ply between Detroit and Windsor. The position is an important one. The captain is by no means a stranger in Detroit, as he sailed out of this port with his father and brothers.

Capt. Jerry Talbot, who sailed the Mariska last season, came to Detroit recently as a witness for the Minnesota Steamship Co., in the case in United Stated court about the collision in Lake St. Clair two years ago last summer, of the Manila, Crescent City and Trevor. After being here a few days he was taken to the Harper hospital suffering from typhoid fever.

The American Ship Building Co. has just taken contracts to build three more steamers to cost about $1,000,000. One is 376 feet long, to be built at Detroit. The other two will have keels 430 feet long and will be the largest ever built on the lakes for ocean trade. They will cost $400,000 each, be built in sections, and taken to the coast to be put together. It has not been decided where they will be built yet.

The steel cargo steamer David M. Whitney was sucessfully launched last Saturday afternoon at the Wyandotte yards of the Detroit Ship Building Co. The Yolande took down a party from Detroit, comprising David Whitney, Jr., friends of the Whitney family, and the office force. The designer, Frank E. Kirby, was not able to be present, owing to illness. The Whitney will be brought up to the Detroit dock, of the shipbuilding company, as soon as the river is free from ice, to receive her boilers and engines. Another big freighter will be commenced at once in the berth made vacant by Whitney's launching. The dimensions of the Whitney are: Length, 420 feet; beam, 50 feet; depth, 28 feet.

A special meeting of delegates from the Masters and Pilots' Association was held in Detroit this week. A number of proposed improvements were discussed, among them being better hospital service on the lakes, the changing of titles from "master" and "mate" to "captain," "first officer," "second officer," etc.; the establishment of a law providing for the issuance of discharge papers to be used as identification in the employment of men on steamers. It is proposed that a law similar to the British maritime law be adopted covering this point. Capt. R. W. England of Detroit has been elected a delegate to visit Washington next week to lay these matters before the proper committees in Congress. A committee will also meet with the executive committee of the Lake Carriers to urge the adoption of the proposed seamen's insurance.

FLOTSAM JETSAM AND LAGAN.

Capt. O. J. Soleau, who was let out of the employ of the Milwaukee tugboat line through the sale of the steamer Neosho, will again command a steamer of the Tonawanda Iron & Steel Co.'s fleet.

John McCaffrey has been appointed chief engineer of the steamer William H. Wolf, vice Thomas Allbrighton, resigned. It is said that Mr. Allbrighton has retired from the lake service permanently.

Capt. Bernard Shean, Cleveland, has received a dispatch from Bay City announcing the death of his father, Capt. M. J. Shean. Deceased was a well-known master, who sailed the lakes for about 38 years. His wife and four children survive him.

Capt. Goodell of the steamer Alfred P. Wright sustained serious injuries in an accident at Manitowoc last week. While descending into the engine room, he lost his footing and fell twelve feet. His collar bone was broken and he suffered internal injuries. He was taken to his home in Chicago.

The Marine Engineers' Benevolent Association of Sturgeon Bay has elected the following officers for the ensuing year; Past president, Frank Bird; president, Charles Wondrasek; vice-president, Frank Kimber; recording secretary, A. Swan; corresponding secretary, Charles Chapman; financial secretary, Henry Devine; treasurer, Ashley Cofrin.

M. J. McCormick, agent of the Lackawanna-Green Bay line at Green Bay, states that the route will be covered next season by the iron steamers Russia and Cuba, and that they are to be provided with cabin and stateroom accomodations for passengers. The report that a fast passenger steamer is being built for the route meets with confirmation.

A bar that will prove dangerous in heavy weather has formed off Grand Haven harbor. It is egg-shaped and extends into the lake from the end of the piers between 300 and 400 feet. The least depth of water over the shoal is said to be fifteen feet. Entrance to the harbor has to be made from southward or northward of the bar, according to the direction of the wind and sea.

In discussing the situation on the lakes in case of the passage of the ship subsidy bill, Frank J. Firth, the chairman of the Lake Carriers' committee said: "The subsidy will be of no benefit to the lake marine and should not be, because of the hauls between the extreme ports of the lakes, but it will apply to lake boats which get to the sea and will be a great thing for shipbuilding on the lakes. It will result in great activity in shipbuilding circles, of which the lakes would get a big share."

The deputy collector of customs at Manitowoc has closed his business for the year 1900. The report shows a marvelous growth of business in shipping. The total tonnage of the year aggregates 3,548,450; the number of vessels entering the harbor in the months being 2,103, while the departures were 2,089. The winter fleet this winter exceeds that of last year by ten, sixty large sized steamers being in winter quarters, and it is estimated that half a million of dollars will be expended on them in the nature of repairs.

The Atlantic Transport Co. has awarded to the New York Ship Building Co., of Camden, N. J., a contract for four passenger and freight steamships, suitable for fast trans-Atlantic trade. This is said to be the largest contract for merchant craft ever awarded to any shipbuilding firm on the Delaware at one time. The Atlantic Transport Co. has heretofore owned only foreign built ships. Two of the vessels will be 600 feet in length, and the others a few feet short of them. The largest are to be 12,000 carrying capacity, and the four when completed will cost the company over $5,000,000

TOLEDO, M. E. B. A.

The following officers were elected for the ensuing term: Past president, John Marshal; president, R. W. Curtis; vice president, J. A. Popp; recording secretary, J. H. Cunningham; caplain, Thomas Winship; conductor, H. D. Fifield; doorkeeper, Eugene Passano.

VIEWS OF FRANK J. FIRTH ON THE SUBSIDY BILL.

In a recent communication to the Detroit Journal Mr. Firth critizes an article contained in the Tribune as follows:

"My attention has been directed to an editorial in the Detroit Tribune of January 17, under the caption, 'Let the Ocean Carriers Hustle for Themselves.' I assume the editorial is written in entire good faith and represents the knowledge of the writer upon the subject to which it relates. The conclusions stated are manifestly incorrect because they are based upon entirely false premises. The lake carriers, who are advised by the editorial as to the position they should take upon an important public question, know, as the Tribune evidently does not, that the carrying business upon the Great Lakes is the most thoroughly protected—'coddled' is the word the Tribune seems to prefer—business in the United States.

Our coastwise laws do not permit any foreign vessels to carry any of our products between our ports, and this beneficent 'coddling' has lined the American shore of the lakes with great shipbuilding industries and put upon the lake waters a merchant marine that is the pride of our country and the wonder of the world in the efficiency and economy of the service. Presumably the Tribune is without this information. The protection thus intelligently extended by the United States to the coastwise and lake vessels it cannot extend, in the same form, to vessels of the United States trading from our ports to foreign ports, where we must meet and compete with the vessels of foreign nations.

These vessels are more cheaply built, operated and cared for than is at present possible with the merchant vessels of the United States. Their foreign owners command cheap capital and through long established commercial and other agencies control the world's markets. Their vessels are, and have been, subsidized by their respective governments. There is no possible parallel between these conditions and any to be found in the trade of the Great Lakes.

The members of the Lake Carriers' Association know all about these conditions, although the Detroit Tribune does not appear to do so, and its lack of accurate information may mislead some of its readers who are not well posted as to the facts. The situation upon the ocean is a very serious one, and one that gravely threatens our very national existence.

In event of war with any first or second class foreign power our naval establishment would be almost useless for our protection or for aggressive warfare without national merchant vessels for the essential transport, supply and auxiliary service.

It is the knowledge of this national weakness, more than even the commercial aspect of the question, that has commanded the untiring effort of so many of our best citizens and statesmen in seeking some method for our practical relief from these dangerous conditions.

The question should not be a party question nor dealt with in any narrow spirit. It is as much a national question as is the creation and maintenance of our naval establishment.

Is it not possible for intelligent men to unite in, and for intelligent journalists to support, an effort of this description irrespective of their affiliations with one or the other of the great political parties upon questions less vitally important?"

FRANK J. FIRTH.

EASTERN FREIGHT REPORT.

Messrs. Funch, Edye & Co., New York, report the condition of the eastern freight market as follows:

Our freight market for grain tonnage has shown continued weakness, and as no short interest has developed so far for this month's loading owners had to make further concessions to effect business. For February loading 3s. 3d. C. f. o. is the outside obtainable for handy sized steamers, whilst for large boats on berth terms shippers ideas are now only 2s. 9d. to picked ports. Cotton charterers from the Atlantic Coast seem to have filled their pressing requirements, and new business can only be consummated at reduced figures. Time charterers are still very limited and what few trades have been made have only been for very short periods. The fixtures for timber are likewise limited and new trades can only be concluded at considerably reduced rates.

In regard to sailing vessels we have nothing whatsoever of particular interest to note. The inquiry for tonnage is not very brisk, while the supply likewise remains rather limited, so that we are obliged to characterize the market as quiet, but firm.

BUFFALO COAL RATES.

The coal rates from Buffalo during the past season were perhaps as good as the average. The rate as kept by leading agents is based on exactly what the coal paid and not a mere averaging of the rate from day to day. The rate to Chicago varied from 30 to 75 cents and averaged .533.6. To Milwaukee there was the same range, 30 to 75 cents, and the rate day by day was the same, but the average was .524, showing that this port took more in proportion on the low rate than Chicago did. The Duluth range was also from 30 to 75 cents, with an average of .413 5, the low figure being on account of the large amount shipped after the rate declined. The Waukegan line was from 35 to 80 cents, with the high average of .706. To Racine the range was 35 to 75 cents, with a .555 average.

THE ST. LAWRENCE CHANNEL.

I notice in the press of late a few statements with regard to the qualifications of pilots on the river between Kingston and Montreal, which are so misleading that I cannot, knowing the circumstances as I do, allow to go unchallenged. It is stated in the press that "pilots should qualify anew," and "that their ignorance is jeopardizing the new St. Lawrence channel." Another statement I cull from the very many I find on this subject is, that "a false impression exists at some shipping points, that the waterway between Kingston and Montreal is not 14 feet deep throughout."

The Mail and Empire prints quite a lengthy article in its issue of the 30th ult., purporting to be a report from Ottawa on this subject. I am not going to weary your readers with the article in full, but no doubt nearly all of our marine men have seen it, and some of the statements therein are false, which I will endeavor to show to the satisfaction of your readers and any of the officials who will care to look into the matter. The article in the press states, that "vessels drawing 14 feet can go quite safely from any of the inland lake ports to Montreal, without the slightest danger of grounding if the new channel is strictly adhered to, and only such pilots are employed who have studied this channel, and are thoroughly conversant with it, etc."

Now these statements are not correct, and I give them a most emphatic denial. During this season just passed, the trade of the River St. Lawrence has suffered more from such statements going out broadcast to shippers and others, wishing to use the St. Lawrence river, than it has from any incompetence of the pilots. I make this statement, and defy contradiction. In the St. Lawrence river trade, between Kingston and Montreal, there are fewer accidents as a result of incompetent piloting, taking into consideration the intricate navigation of the route, than in any other portion of the world. It is true that an accident happens once in a while in this trade, but in most cases it will be found that these accidents happen to boats from some other cause than from the incompetence of the pilot.

During the past season the Government engineer in charge of the section of the river, between Prescott and Cornwall, has, to the writer's knowledge, swept the river bottom several times, with the result that he has advised our pilots that they cannot use the channel at the head of the Cardinal canal with safety, drawing more than 12 feet of water. Now this is a fact well known to the writer, and all others in the business, and why should Engineer Marceau mislead the public by stating (as reported in the press last week) that 14 feet draught can be used with safety between Kingston and Montreal? I know that Engineer Marceau is a competent man in his business, but when he talks so emphatically about there being a 14-foot channel, which can be used with safety between Kingston and Montreal, he is simply talking about something he is not conversant with.

Above the head of the Cardinal canal, and within a quarter of a mile of the entrance, there is a shoal, over which all downward-bound vessels must pass, and at present this shoal is the key of the situation. A very careful test of the water at this point, made on the 13th of November last by the Government engineer in charge, revealed the fact, well known previously by our pilots, that when there is a depth of water corresponding to 10 feet on the mitre sill of the old guard lock, (and that is the average depth at present), there is a channel 140 feet in width at this point, with safe navigation for a vessel of 12 feet draught. Since the engineer found it to be a fact, he established a gauge at Prescott on the elevator dock, corresponding to this 8-foot datum, and the water, as indicated on the gauge, shows a depth to which a vessel may load with safety.

Now, in the face of these facts, what is the use of anyone making the broad statements that have been made in the press of late, concerning the depth of water in this channel. It is true the canals have been deepened to 14 feet, but the shoal that I mentioned must be passed over by all downward vessels, before entering the canal at this point, and the sooner the Government realizes this fact, the better for our trade via the St. Lawrence river. During the east wind of last week the water lowered so much that the gange at Prescott, put there by the Govornment engineer, indicated that a vessel could only navigate with safety over the shoal I have mentioned drawing 10 feet 9 inches. Some of our downward-bound vessels have struck on this shoal this summer right between the buoys, and the pilots knowing that the shoal was there, refused to take vessels down at too deep draught, and in consequence we are now told in the public press by men who do not know anything about the channel that the pilots are incompetent.

Now, when this shoal has been attended to, there will be found more dangerous ones at Sparrow Hawk Point, and in Rapide de Platt, and with reference to the latter, the man who has had charge of the sweeping states that "there is barely 13 feet of water right in the middle of a very stiff current." I do not wish to mention the names of the officials to whom I refer, as I have every respect for them, and confidence in their ability, but I challenge contradiction to any of the statements herein made. Whatever concerns the St. Lawrence river route concerns the whole of Canada. The present Government, and Governments in the past, have done a great deal to assist the route, and are deserving of every praise. As the shoals I have mentioned are not very large ones, would it not be better for everyone interested to assist the Government of the day, by giving them information on the subject, and help them remove the obstacles, which injure the route, instead of filling the press with alarming articles about the incompetence of our pilots. The Ottawa dispatch referred to states that cases have occurred where vessels have grounded, but it has been found the cause has been either that the pilot was out of his course, or that the captain of the vessel had not gone down the canal, but preferred to take his chances outside in the river." Now the shoal I have mentioned, as I said before, must be passed over by every vessel bound down the St. Lawrence river, and to take the canal to escape the other spots menetioned, one has to navigate through two miles of a canal, in which there is only 8½ feet depth of water, and through one of the old locks measuring only 200 feet in length.

I trust that I have not hurt the feelings of anyone by writing this very plain letter. I will not answer anonymous correspondents. I am prepared to prove that every statement I have made in this letter is correct.

Yours, etc.,

THOS. DONNELLY, Inspector.

Kingston, Dec. 3rd.

NAVAL VESSELS UNDER CONSTRUCTION.

The following is the degree of completion of vessels under construction for United States Navy Jan. 1, 1900, as shown by the official records: Battleships—Illinois, 87 per cent.; Alabama, 90 per cent.; Wisconsin, 99 per cent.; Maine, 40 per cent.; Missouri, 21 per cent.; Ohio, 36 per cent. Sheathed Protected Cruisers—Denver, 37 per cent: Des Moines, 12 per cent.; Chattanooga, 17 per cent.; Galveston, 6 per cent.; Tacoma, 13 per cent.; Cleveland, 40 per cent. Monitors—Arkansas, 46 per cent.; Nevada, 76 per cent.; Florida, 56 per cent.; Wyoming 65 per cent. Torpedo Boat Destroyers—Bainbridge, 86 per cent.; Barry, 84 per cent.; Chauncey, 85 per cent.; Dale, 88 per cent.; Decatur, 88 per cent.; Hopkins, 70 per cent.; Hull, 69 per cent.; Lawrence, 99 per cent.; Macdonough, 98 per cent., Paul Jones, 80 per cent.; Perry, 85 per cent.; Preble, 80 per cent.; Stewart, 45 per cent.; Truxtun, 51 per cent.; Whipple, 50 per cent.; Worden, 49 per cent. Torpedo Boats—Stringham, 98 per cent.; Goldsborough, 99 per cent.; Bailey, 99 per cent.; Bagley, 98 per cent.; Barney, 99 per cent.; Biddle, 96 per cent.; Blakely, 97 per cent.; DeLong, 97 per cent.; Nicholson, 83 per cent.; O'Brien, 86 per cent.; Shubrick, 97 per cent.; Stockton, 99 per cent.; Thornton, 93 per cent.; Tingey, 67 per cent.; Wilkes, 70 per cent. Submarine Torpedo Boats—Plunger, 3 per cent.; Adder, 20 per cent.; Grampus, 2 per cent.; Moccasin, 11 per cent.; Pike, 2 per cent.; Porpoise, 10 per cent.; Shark, 10 per cent.

VISIBLE SUPPLY OF GRAIN.

As compiled for THE MARINE RECORD, by George F. Stone, Secretary Chicago Board of Trade.

CITIES WHERE STORED.	WHEAT. Bushels.	CORN. Bushels.	OATS. Bushels.	RYE. Bushels.	BARLEY Bushels.
Buffalo	3,067,000	13,000	45,000	65,000	1,050,000
" afloat	1,044,000	.....	162,000	.....	.....
Chicago	11,641,000	3,245,000	3,080,000	627,000	259,000
" afloat	57,000	91,000	397,000	.....	.....
Detroit	522,000	354,000	.....	44,000	29,000
Duluth	6,737,000	1,467,000	841,000	280,000	78,000
Fort William, Ont.	1,376,000	.....	.....	.....	.....
Milwaukee	1,026,000	509,000	570,000	1,000	32,000
Montreal	89,000	16,000	88,000	9,000	42,000
Port Arthur, Ont.	255,000	.....	.....	.....	.....
Toledo	498,000	1,527,000	415,000	11,000	.....
Toronto	76,000	.....	2,000	.....	11,000
On Miss. River	.....	78 000	.....	.....	.....
Grand Total	61,196,000	11.743,000	9,535,000	1,217,000	2 011,000
Corresponding Date, 1899	56 536,000	14.144,000	5,088,000	1,213,000	1,920,000
Increase	....	1,111,000	323,000	.....	.....
Decrease	649,000	....	.....	25,000	219,000

While the stock of grain at lake ports only is here given the total shows the figures for the entire country except the Pacific Slope.

NOTES.

THE new Ward Line steamships building at Cramp's shipyard are to be named the Esperanza and Monterey. They will ply between New York, Cuba and Mexico, in both passenger and freight service.

A STORY is going the rounds to the effect that the great Lake Baikal ice crusher of the Russian government was designed by Frank E. Kirby of Detroit, the plans being sent to St. Petersburg and Kirby getting no money for his work. It is said the Russian government, after asking Kirby over there, made things so difficult that he returned in disgust, and an English company built the boat according to Kirby's plans.

D. KAHNWEILER'S SONS, with their usual enterprise, opened the century by presenting their friends and patrons with a handsome calendar. The calendar is well executed, and contains an attractive lithograph of the departure of the life boat on its errand of mercy. In addition the back page contains a fully illustrated and descriptive list of the life-saving appliances for which the firm of D. Kahnweiler's Sons have earned a wide reputation.

IN regard to the criticism of the secrecy with which the building of the Shamrock II. is surrounded, compared with the publicity in the case of the construction of the defending yacht, Sir Thomas Lipton says: "I do not believe the Herreshoffs are letting out any details. The secrecy we are observing is nothing to what the Herreshoffs exercised with their last boat. Why, they even launched it at night. Moreover, do you suppose I would challenge again unless I believed Watson had discovered an important improvement? Why should I let the world know the nature of that improvement? Watson thinks secrecy is necessary, and I perfectly agree with him."

IT having been brought to the attention of the Bethlehem Steel Company, South Bethlehem, Pa., and New York, that a concern styling itself the Edison-Holzer Steel and Iron Process Co. has been using the name of the Bethlehem Steel Company in a letter issued by them, in which they ask for subscriptions to the stock of their company, the Bethlehem Steel Company, in a letter to the MARINE RECORD, state that they have no connection whatever with the Edison-Holzer Steel and Iron Process Co., nor do they in any way endorse the merits claimed by that concern for their process for treating steel.

THE City of St. Catharines has been trying for some time past to develop electric power from the Welland canal. It forgot, however to figure on the fact that the water power of the Niagara Peninsula has been cornered by the Attorney-General of Ontario for the benefit of his company, the Cataract Power Co. The city applied for water power last spring, but it was put off on the ground that the Government engineer would have to report on the capacity of the Welland canal to furnish the supply asked for before the request could be granted. It now turns out that the power which should have gone to St. Catherines was being held in reserve for Attorney-General Gibson's own private company.—Toronto World.

FRANK T. BULLEN'S volume on "The Men of the Merchant Service" is designed to give the landsman some idea of the real character of life in the merchant marine, more particularly the British mercantile marine, although there are occasional digressions to the American marine. In the beginning Mr. Bullen points out the wrong ideas gathered from most fiction dealing with the sea, especially as to the manner in which the seaman rises to become master. Then he describes the facts of the case, and in successive chapters deals with the position, duties and usual life of the master of the liner, of a tramp and of a sailing ship; of the mate on a steamer and on a sailing ship; of the second and third mates, the bos'un, the carpenter, the sailmaker, the steward, the cook, the apprentice, the able seaman, the boy, the engineer, the fireman and trimmer, with suggestions in regard to the several classes and as to the future of the mercantile marine, British and American. Mr. Bullen was a salt water sailor in the days of sailing ships, and he has had therefore, more personal knowledge of conditions on the "white winged messengers of commerce" than on the smoky steamer, and his sympathies with the sailing branch of the mercantile marine are not concealed. Of the conditions on the mercantile marine of the Great Lakes he knows nothing and therefore says nothing. The conditions are widely different in many important respects, from master to deckhand. —Frederick A. Stokes Co., New York: The Helman-Taylor Co., Cleveland, O.

IMPORTANT TREASURY DECISION.

GRAIN IN TRANSIT.

Storage in nonbonded elevators pending trans-shipment of Canadian grain entered for transportation and exportation.—Treasury Decision 11502 and 19051 modified.

TREASURY DEPARTMENT, Jan. 10, 1901.

Sir: The Department is in receipt of a communication, dated the 17th ultimo, from the collector of customs at Port Huron, Mich., transmitting a letter from T. R. Wright, secretary and treasurer of the Botsford Elevator Co. of this port, and a letter addressed to Mr. Wright by A. F. Reed, foreign freight agent of the Grand Trunk Railway, complaining of the requirement of consular invoices at Port Huron, when they are not required at your port for Canadian grain intended for transportation and exportation, but entered for warehousing pending the procurement of transporting vehicles.

The collector at Port Huron states that—"On the arrival of a vessel at this [his] port containing grain intended for immediate transportation and exportation, the necessary cars for the transportation of said grain not being obtainable the grain is liable to lay in the warehouse from ten to thirty days, and this [his] office requires the consignee to file entry for warehouse, accompanied by consular invoice in compliance with the requirements of Article 394, Regulations of 1899, and Treasury Decision 19051."

In a letter dated April 17, 1899, you reported that Manitoba grain arriving at your port under transportation and exportaion entries at Pembina was deposited in bonded elevators and was generally transferred therefrom to vessels for exportation to Canada or to Europe under entries for warehouse and exportation or for warehouse, transportation and exportation without consular invoices or owners' declarations in accordance with Treasury Decision 11502 of July 23, 1891, and instructions contained in letters of this Department dated March 30 and May 6, 1896.

Treasury Decision 11502, cited by you, provides that Canadian grain arriving at your port in transit may, if the owners thereof or their authorized representatives desire, be re-entered at your port of transportation and exportation via any ports on the Atlantic seaboard in the same manner as though imported at your port directly from Canada. These instructions, it appears, were construed by you as contemplating the entry of such grain at your port for warehouse and exportation, or for warehouse, transportation, and exportation according to destination, instead of for transportation and exportation as stated. It is further apparent that this construction was tacitly approved by the Department in its letters of March 30 and May 6, 1896 (Division of Special Agents), waiving the requirement of consular invoices in connection with such warehouse entries.

Treasury Decision 19051 of March 5, 1898, to which the collector at Port Huron refers as authority for the requirement of consular invoices for grain arriving in transit at his port, provides that—"Where on arrival at the first port of importation of goods from Canada intended for immediate transportation and exportation no transporting vehicle can be obtained for transshipment of the merchandise from the importing vessel to the exterior port for exportation, the goods should be sent to a bonded warehouse in accordance with the provisions of Article 604 of the above regulations (1892) and the importer, consignee, or agent required to make a regular entry for warehouse, transportation, and exportation as prescribed by Article 380 of said regulations, accompanied by a consular invoice in compliance with the terms of Article 285 of said regulations."

The conditions of which Treasury Decisions 11502 and 19051 are predicated differ in one material respect. In the first case the grain is regularly entered for transportation and exportation at Pembina, the port of arrival in the United States, and forwarded to your port for storage in an elevator pending the arrival of vessels or the opening of navigation, while in the latter case the grain is transferred to elevators at the port of arrival pending transshipment. In both cases the grain is shipped from Canada under the regulations for merchandise in transit for exportation. These regulations authorize the entry for transportation and exportation at the port of arrival in the United States of grain or other merchandise shown by the bill of lading and other papers to be intended for transit through the United States and exportation to a foreign port therein designated. A consular invoice is not required, but a bond must be given in a penal sum equal to double the value of the goods, with the duties added, to run for four or six months, according to the route. Invoices are waived for the reason that such shipments are not importations within the meaning of the law requiring the production of certified invoices. As none but imported merchandise can be entered for warehousing, it is obvious that the entry of such grain at your port for warehouse and exportation, or for warehouse, transportation, and exportation, without the requirement of consular invoices, is irregular and should be discontinued. On the other hand, entry for warehousing and production of a consular invoice, where the papers show the merchandise to be intended for shipment abroad and transit is delayed through no fault of the shipper or owner, subject the parties in interest to unnecessary inconvenience and expense.

In order to remedy this, and to secure uniformity of practice at the several ports, you are hereby informed and instructed that Canadian grain hereafter arriving at your port under transportation and exportation entries at Pembina may be placed in a nonbonded elevator as an incident of the transportation and be transferred therefrom to the transporting vehicle without re-entry at your port, and that Canadian grain hereafter arriving at any port on the frontier in transit through the United States for exportation to a place in Canada or other foreign country may be put in a nonbonded elevator, after entry, for transportation and exportation, and be duly transshipped under said entry without the requirement of a consular invoice, provided that the delay is not of sufficient duration to prevent exportation within the period specified in the bond and that the bins and spouts of the elevators be secured by customs fastenings.

Treasury Decision 20909 of March 28, 1899, relating to the diversion of transit goods, is not affected by this decision.

If any such merchandise should be entered for consumption or otherwise be withdrawn from transit, it would be subject to the requirements of the law and regulations governing importations generally.

Treasury Decisions 11502 and 19051 are modified accordingly.

Respectfully,

O. L. SPAULDING,
Ass't Sec'y.

Collector of Customs, Duluth, Minn.

NOTICE TO MARINERS.

LIGHT-HOUSE ESTABLISHMENT,
OFFICE OF THE LIGHT-HOUSE INSPECTOR, 9TH DIST.,
CHICAGO, ILL., January 21, 1901.

FRANKFORT PIERHEAD (REAR), MICHIGAN.—Notice is hereby given that the Frankfort Pierhead (rear), red lens lantern was damaged and the light extinguished, in the gale of January 20th, 1901.

The light will be re-established as early as practicable.

By order of the Light-House Board.

F. M. SYMONDS, Commander, U. S. Navy,
Inspector 9th L. H. District.

UNITED STATES OF AMERICA—NORTHERN LAKES AND RIVERS—PENNSYLVANIA.

TREASURY DEPARTMENT,
OFFICE OF THE LIGHT-HOUSE BOARD,
WASHINGTON, D. C., January 16, 1901.

PRESQU'ILE LIGHT STATION.

Notice is hereby given that on January 15, 1901, the light at this station, flashing alternate red and white, was discontinued for repairs to the illuminating apparatus. The light will be relighted on or about February 1, 1901, or as soon thereafter as may be required by the interests of navigation.

The station is located on the southerly shore of Lake Erie, the northerly shore of Presqu'ile, about ⅜ mile from its most northerly projection, and about 3 miles by water to the westward of the entrance to Erie harbor (Presqu'ile Bay).

By order of the Light House Board:

FRANCIS J. HIGGINSON,
Rear Admiral, U. S. Navy, Chairman.

A BALLAD OF BEING BROKE.

When the last string snaps and a man goes broke,
He turns to the woods or the sea;
He cuts clean loose from the home-bred folk,
And life is a gamble, and death is a joke,
And the universe good to see.

There's a brand-new sort of a fate for him;
They may languish early and late for him;
The bird on the wing is a mate for him;
And the hawk on the hunt goes free.

There's the brown and gloom of the forest track,
Where the deer go ghostly by;
There's the starving camp and the dead-weight pack,
And a wolf's fierce life in the pine woods black,
And the freedom of the sky.

There's the plunging deck and the jarring screw,
And the oilskins bright with foam;
The stokehole's blaze and its naked crew,
And the sharp, salt breath of the landless blue,
Where a man forgets his home.

We know it, my friends, of the "broke brigade,"
Pals of the plain and sea;
The artists of life and the fools of trade,
But we think we know how the game is played,
And we know where it's best to be.

There are some that may wait and pray for us;
There is luck that never will stay for us;
But the woods and the waves make way for us
When the "broke brigade" goes free!

—Maritime Register, Philadelphia.

BUFFALO reports state that there is prospect for a big demand for lumber carriers as soon as the lakes open in the spring. There will be no hanging back as there was last spring, unless a great change in market conditions occurs before that time. The demand is likely to carry off the entire winter stock, both there and at Tonawanda. There is none of account to be had from Canada, or it would be brought in by rail.

AT a technical school in Dresden, the basement has been fitted with a large iron tank in which miniature duplicates of river channels are laid out in sand and a flow of water is directed through these channels. By laying out this miniature river to duplicate channels where important engineering constructions are to be undertaken and placing in them models of these engineering structures a very accurate idea of their effect in relation to the flow can be obtained and all features of erosion or depositation can be accurately studied.

SHIPPING AND MARINE JUDICIAL DECISIONS.

(COLLABORATED SPECIALLY FOR THE MARINE RECORD.)

Admiralty—Amendment of Decree—Expiration of Term.—A court of admiralty has no power to amend a final decree on petition or motion for a rehearing filed after the expiration of the term at which the decree was enrolled, even though error in its findings is shown. Pettit vs. One Steel Lighter, 104 Fed. Rep. (U. S.) 1002.

Admiralty Pleading—Issues—Petition of Intervention.—Where the respondent in a suit in admiralty desires to raise a new issue, in addition to those raised by the answer as filed, it should be done either by amendment to the answer or by a proper plea. When the answer was filed by the master of the libeled vessel as agent for the owners, such owners cannot raise a new issue by a petition in intervention, filed without notice to the libelant, or the service of a copy on him. The Alexandria, 104 Fed. Rep. (U. S.) 904.

Collision—Boat at Anchor—Proximate Cause.—Where in an attempt to enter a slip, the wheel of the boat picks up the anchor chain of another boat, which is anchored in East river, within 150 feet of a wharf, in violation of the Treasury Department regulations, whereby it is drawn towards the latter boat, and into collision with it, the owner of the latter cannot maintain on action for the injuries sustained, since his unlawful act in so anchoring is the proximate cause of the injury. Foley vs. McKeever, 67 N. Y. Supp. 559.

Recoupment from Damages for Collision—Necessity of Cross Libel.—In a suit for collision, brought by the owner of one of the vessels, which was sunk, and the owners of her cargo, against the other vessel, in which the two vessels were held equally in fault, and the recovery of the libelant vessel owner restricted to one-half his loss, but full recovery was decreed against the respondent vessel for the losses sustained by innocent cargo owners, where all the parties in interest were before the court, and participated in all the controversies arising in the suit, the failure of the libeled vessel to file a cross libel, and have process thereon issued and served as permitted by admiralty rule 59, will not preclude it from recouping from the amount awarded against it in favor of the other vessel one-half the loss of the innocent cargo owners, which it is required to pay in full. The Livingstone, 104 Fed. Rep. (U. S.) 918.

Shipping—Breach of Charter—Inability to Insure Cargo.—It was a condition of a parol charter of a sailing vessel to carry a cargo on the Great Lakes that the charterers should be able to procure insurance on the cargo. Owing to delays, the vessel did not arrive at the port of loading until November 14 some two weeks after the time her agent had stated she ought to arrive, and, by reason of the fact that navigation by vessels of her class was considered extra hazardous at that season of the year, the charterers were unable to insure her cargo, and they refused to load her, they applied to but a single agency in Buffalo for insurance but such agency represented a number of companies, and did a large business in marine insurance. It appeared that the charterers acted in good faith, and they paid a higher rate of freight for the carrying of the cargo by a larger vessel, which enabled them to effect insurance thereon. Held, that they were not liable for damages for a breach of the charter. Oades et al. vs. Pfohl et al., 104 Fed. Rep. (U. S.) 998.

Negligence—Evidence.—Plaintiff's father was fishing on a clear, moonlight night with plaintiff's net, in a fish boat, which was well lighted and plainly visible at a considerable distance. The fish boat was lying almost motionless near the middle of the stream, which was about a half a mile wide, and the net extended to the eastward to within 200 feet of the shore, with its buoys all visible. Defendant's tug boat approached, towing a number of loaded canal boats in the middle of the stream, headed slightly towards the west, and by following such course would have avoided the fish boat. When about 200 feet from the fish boat the pilot of the tug changed the tug's course without any reason, and ran to the east of the fish boat, and about 2 feet from its stern, catching the net and cutting it in two, and dragging the boat alongside the tug. Just as he changed the tug's course, the pilot saw that the men in the boat were pulling in the net. Held to show gross negligence in the navigation of the tug boat, since it was the duty of the tug to keep away from the fish boat, and its owner was therefore liable for the damages. Polhamus vs. Cornell Steamboat Co., 67 N. Y. Supp. 577.

THE Standard Automatic Releasing Hook Company, of 17 State street, New York, has issued a handsome calendar and almanac for mariners, giving the hours of high and low tides for every day in the year at Sandy Hook, Governor's Island and Hell Gate.

THE southern magnetic pole is now located at 73 deg. 20 min. S. and 146 deg. E. Such, according to E. E. Borchgrevink, is the result of the late Southern Cross expedition, which wintered at Cape Adare, on South Victoria Land, and which made magnetic observations along the coast as far south as about 78 deg. 45 min. The magnetic dip was noted at eight places, including one point where it was measured by James Ross in 1841. The dip had decreased 1 deg. 32 min., and it was concluded that the magnetic pole had shifted much to the north and west in fifty-nine years.

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CLEVELAND, O., JANUARY 24, 1901.

SINCE no re-examination is required in changing masters' licenses each five years, why not have licenses made out permanently? The RECORD has always advocated a rigid examination and a continuous license. For a number of years certificates had to be renewed annually, like a dog tax, then a year or two ago a five year extension was allowed, and now with certain modifications licenses are made continuous according to service. This has been brought about through the representations of a delegation of lake shipmasters. It is much to be regretted that no advantageous rulings can be formulated as originating from the board itself, all improvements in the rules, etc., having to be brought forward and argued by private interests, which after all is a good deal like the tail wagging the dog instead of vice versa.

OF ALL the nonsensical ideas to come before us recently, is that which an association of licensed officers feels called upon to ask the favorable action of Congress. This association asserts that masters should receive national authorization to dub themselves, and have all the world and his wife know that they are not masters—shipmasters—master-mariners, but Captains if you please, a mate is to be known as 1st officer, and the second mate as 2nd officer, stations corresponding to the duties now filled by lake pilots. We can but say that when an association has no other business than such twaddle as the foregoing to harp upon, it is doing but little for the advancement of its membership. It is quite possible, however, that there might be some distinction of ability and position signified, as between, say, Capt. Mahan, U. S. N., and Capt. Pannikine of the canal boat, "Let her Rip," this being so, the same argument would apply as between the ten ton coasting sloop, and the eight thousand ton full rigged sailing ship, each of which is in charge of a master, again there is a wide difference and a vast number of grades of qualification between the person in charge of a craft under steam, that can be turned around almost by the weight of the end of your finger, and that of the man in charge of a ten, fifteen, or twenty thousand ton cargo, passenger, or mail steamer. The prefix or title of Captain in the merchant service is a term granted by custom and courtesy, but the master of a craft has no inherent legal or other right to be so called. Admiral Dewey or Capt. "Bob" Evans are sailors, (at least we hope so) the deck hand on the back of a sea-gull would tell you that he also was a sailor, but it must be admitted that there is a mighty wide difference somewhere. The canalboatman towing through a field where a plowman was at work, asked the latter why their trades were so much alike, this of course palled the plowboy. The canalboatman then somewhat bumptiously explained that one plowed the land and the other plowed the ocean. So much for degrees of sailorizing, masters and captains. We may say, however that the latter is distinctly a naval term.

NEW YORK STATE CANALS.

The necessity of a speedy determination of the canal improvement question is called to the attention of the State Legislature by John N. Partridge, State Superintendent of Public Works, in his annual report submitted to the Senate and Assembly. The decrease in the number of tons of freight carried from 3,686,051 in 1899 to 3,345,941 in 1900, he attributes in part to the unsettled policy of the State concerning the future of its waterways. In this connection, the report says: "In calling attention to the decrease in canal tonnage the last season in comparison with that of the previous season, I have assigned as one of the reasons therefor the lack of boats, resulting from the abandonment of old boats and the failure to replace them with new. The condition is emphatically the direct result of the unsettled policy of the State so far as the future of the canals is concerned. Capital, which otherwise might seek investment in traffic equipment, seeks other channels, and will continue so to dc until it has been determined whether or not the State's waterways are to be improved.

"The fact that of the total decrease, 307,058 tons was in the through freight east and that the remaining decrease was less than 24,000 tons leads to the conclusion that the decrease in traffic was also largely attributed to a rate war which at that time was in progress between shippers and boatmen, and boats were tied up for a long time in Buffalo awaiting higher rates.

"Another cause of the falling off in tonnage was probably the unusually late opening of the lake navigation, viz., April 23.

"A third cause was the strike in the coal regions, which materially reduced coal shipments, particularly on the Champlain canal. In my report of last year among other recommendations I suggested the repeal of so much of chapter 935 of the laws of 1896 as tends to prohibit the formation of canal transportation companies with a capital in excess of $50,000. I am still of this opinion, and, therefore, again earnestly urge the repeal of the said provisions of the law.

"The condition of the canals is excellent. Not in many years have they been in as good and safe a condition as they are today. The expenditures for maintenance and ordinary repairs of the waterways during the last year amounted to $959,896."

An appropriation of $350,000 for ordinary repairs is requested.

RULES OF THE ROAD.

The case of the Butler-Ryan Co. against E. T. Williams & Sons, in the Duluth District Court, was decided this week in favor of the plaintiff, the jury bringing a verdict of $1,640. The case has involved much of interest to vesselmen, as the result would determine the respective rights of lake craft and the dredge tugs and scows in the use of the Duluth ship canal. The court holds that the rights are equal. It has been contended by dredge operators that steamers should wait for the tugs and their scows when the latter were in the canal and bound out toward the lake. Judge Cant holds that the dredge tugs are to so handle their scows that there will at all times be sufficient room for the free movement of lake vessels.

In the case that has just been determined, the Butler-Ryan Co. which has a contract for the construction of the sub-structure of the northerly pier of the ship canal, brought suit against E. T. Williams & Sons to recover for damage done to newly driven piling by the cargo steamer M. B. Grover. The accident happened in 1899. The story of the case is that the steamer was incoming and that the tug Martin, towing a scow, was bound outward, and they met in the canal. The scow was attached to the tug by a rather long line, in consequence of which the former sheered from side to side considerably. This action on the part of the scow was influenced to some extent by a strong current which ran in from the lake toward the harbor. As the steamer and scow approached each other the latter sheered over toward the former. The master of the steamer saw that a collision with the scow was inevitable unless he should run his boat into a row of piling on the north side of the canal, and this he did. The piling had been placed by the Butler-Ryan Co., and after investigating the circumstances the latter brought suit against the owners of the tug and scow instead of the steamboat.

The gist of the decision is that tugs handling scows must keep them under control in the Duluth ship canal and that steamboats have equal rights in that waterway with tugs and scows at all times.

S. D. Allen and Searle & Spencer were attorneys for the plaintiff and Baldwin & Baldwin and John Norton were attorneys for the defendant.

HOW TO ENCOURAGE SHIPBUILDING IN CANADA.

Canada has spent tens of millions on her canals, but it looks as if they were going to be utilized principally by the United States. We have built the canals. The United States will get the principal benefit of them. That is, unless Canada takes steps to protect her own interests. The new canal system will require a special type of vesse!, and United States shipbuilders are now laying down a number of keels in United States yards along the Great Lakes for vessels of this type. Scores of them will be built within the next two or three years. If the present law is allowed to stand, all such vessels will be built in Great Britain, Germany or the United States. Ships having a British registry are admitted free of duty to Canadian registry. Vessels can be built at Cleveland and Chicago, go to Newfoundland or Bermuda, change to a British registry free of duty, and come into Canada free. This is what the United States shipbuilders contemplate doing. Should they wish to return to the United States flag, they can do so under the wide interpretation of their custom laws, which allows any article manufactured in the United States to return duty free. Canada must protect herself against the unfair competition of foreign shipbuilders. No foreign vessel should be allowed to obtain Canadian registry unless duty is paid on them. Canada has all the facilities necessary for the shipbuilding industry. The enactment of such a law as we have suggested would have the effect of establishing large ship building plants at Toronto, Collingwood and other lake ports. The building of these canal ships in Canada will mean much for the laboring classes. It will mean the establishing of new industries, the stimulation of iron and steel manufactories and increased population. And not only should Canada impose a duty for registry of foreign ships but she should discriminate in favor of Canadian vessels in the use of the Canadian canals. We should either rebate the canal tolls on Canadian vessels or increase the tolls on foreign vessels. This policy should be adopted now, before we are under any obligations, moral or otherwise, to any other country, as far as the use of our canals are concerned.

There need be no fear of retaliation from the United States. They have already gone the limit against us. It is not possible for them to do anything further to injure the Canadian carrying trade. They have long ago prohibited Canadian vessels from participating in the United States coasting trade. We have been denied the use of the New York State canals. The only plan of retaliation that is possible would be the abolition of the so-called bonding privileges, by which the Canadian railways would be inconvenienced. But the United States railways operating lines in Canada would suffer just as badly as the Canadian companies. Railway retaliation is a mere scarecrow. There is nothing in it. Canada should deal with her own property in a way that is most conducive to her own welfare. The canals are the sole property of Canada. They are not international and the people of the United States do not carry on their national affairs on a sentimental basis.

We have a perfect right to give our own people any advantage in affairs of this kind. The Americans apply that principle to themselves, and they can only commend it to us. Those who are charged with the affairs of this country should act on the plan outlined at once. Otherwise Canadians will be furnishing canals for foreign nations, and in a couple of years what is now a privilege will become a right.—Toronto World.

MANITOWOC'S WINTER FLEET.

The winter fleet at Manitowoc was completed last week by the arrival of the steamer M. M. Drake and big steel barge Amazon from Milwaukee. As now constituted it is as follows:

Steamers.—Andrew Carnegie, Sitka, C. Tower, jr., Alva, Hesper, Maurice B. Grover, Rufus P. Ranney, Thomas Maytham, Fedora, Nyanza, W. B. Morley, H. S. Pickands, M. M. Drake, A. Folsom, City of Rome, City of Naples, Massachusetts, Columbia, Manhattan, Alfred P. Wright, Merrimac, John Craig, Hiawatha, F. E. Spinner, Waverly, Welcome, City of Green Bay, Cleveland, Christopher Columbus, Virginia, City of Racine, Georgia, Sheboygan, Chicago,

Tugs.—Niagara, Sampson and River Queen.

Barges and schooners.—Amazon, Aurora, Yukon, Mary B. Mitchell, F. A. Georger, S. M. Stephenson, May Richards, J. A. Holmes, Burt Barnes, Lizzie Metzner, Emma L. Nelson, James H. Hall, Lineria, Oscar Newhouse, Isoldo Bock, Leo. Franc Miner, Merchant, Jessie Martin, Little Georgy, Active Mishicott and Libbie Carter.

ST. LAWRENCE WINTER NAVIGATION.

A meeting in reference to winter navigation of the St. Lawrence, held in Quebec, recently, was addressed by J. X. Perreault, Canadian Commissioner to the Paris Exhibition, representing Armstrong, Mitchell & Co., the well-known ship builders; Col. McNaught, one of the directors of the Great Northern Railway of Canada; Capt. Inman of Duluth, and O. W. Norden, of Finland and Paris. Mr. Perreault had greatly interested himself in the models of ice-breaking vessels built by Armstrong & Co., which were shown at the Exposition, and brought one of the models to Canada with him. Capt. Inman, who has taken a great deal of interest in the subject of winter navigation, said that it struck him as singular that navigation on the St. Lawrence should cease during the winter. He had been conversing with pilots and found that the river was seldom frozen over entirely. He pointed out that winter navigation where ice has to be contended with has been practiced in America for 30 years. With a small boat of 250 h. p. he had kept the harbor of Duluth open all winter, although they had ice of from 18 to 36 inches in thickness to deal with. He saw nothing to prevent vessels keeping up regular trips from Duluth to Georgian Bay ports all winter. With the river open from Quebec to the sea, western grain could be exported with the minimum of land carriage.

Mr. Norden has been intimate with the winter navigation of the Baltic for the past 16 years. The work was begun there in a tentative way, but uuder the encouragement of the various governments interested it is developing into enormous proportions, which is proof sufficient that from a commercial point of view the enterprise has been profitable. The winter there, he says, is quite as severe as along the St. Lawrence. He considered that winter navigation was practicable here, even more so than on the Baltic, where they did not have the advantages of the tides. As it had been shown that the risk was not considerably larger than by ordinary navigation, he did not believe that insurance rates would be too high to leave any profit in the business.

Col. McNaught said that when the G. N. R. was nearing completion the company became interested in the subject of winter navigation. He got in communication with Capt. Inman and other experts. He also had a number of interviews with the Detroit dry-dock people, who have perhaps more experience in winter navigation and in building boats for winter navigation on the Great Lakes and in other parts of the world than any other company in existence. These gentlemen have no doubt of the practicability of the scheme. Col. McNaught has snbjected the matter to the cold analysis of a business calculation. It costs 25 per cent. more to build steamers suitable for the work and 25 per cent. more to operate them. But even with these increased expenses water carriage could still underbid carriage by railway. A saving of $5,000,000 a season could be effected on the products shipped from Duluth alone. So confident are the Detroit men of the feasibility of the scheme that they have become members of a company formed by Col. McNaught for the purpose of going into the business. If the federal government is disposed to assist in establishing the service, the following offer will be made by the company: It will furnish one-half money necessary to build three steamers and three ice tugs and operate them, if the government will complete the necessary lighthouses and contribute as a subsidy enough money to cover the additional expense of a winter boat, and enough money in annnal subsidies for a few years to pay the additional cost of insurance for winter navigation.

LAUNCH OF THE KINGSTON.

An influential party from Montreal arrived at Toronto on Saturday morning last, to attend the launch of the new Richelieu and Ontario steamer Kingston, which took place Saturday afternoon at Bertram's shipyard. Among them were Messrs. W. Wainwright, vice-president of the R. & O. N. Co.; Rudolph Forget, Hector Mackenzie, Wm. Hanson, directors of the company; Judge Achilie Carriere, Charles Archer, C. F. Gildersleeve, general manager; H. M. Bolger, secretary-treasurer; Thos. Henry, R. McEwen, Capt. Grange and Gilbert Johnson, superintendent of the company. The launch took place at three o'clock, the christening ceremony being performed by Mrs. Osborne, wife of Mr. J. Kerr Osborne, vice-president of the Massey-Harris Co., one of the Toronto directors. The Kingston will be an improved and enlarged Toronto. After the launch a luncheon was given in the dinning room of the Toronto.

The dimensions of the steamer Kingston are as follows: Length over all, 290 feet; extreme breadth over guards, 64 feet; molded depth of hull, 14 feet; depth of steamer from top of dome deck to bottom of keel, 43 feet. The steamer has five decks, viz., the orlop, or the lower deck, the main deck, saloon deck, gallery deck and hurricane deck. The machinery consists of an inclined three-crank triple-expansion engine, with cylinders 28 inches, 44 inches and 74 inches in diameter, respectively, having a common stroke of 6 feet. The paddles are 22 feet in diameter. The steam is furnished by four cylindrical return tube boilers, 11 feet diameter, and 12 feet long, passed by the Canadian Government inspectors for 184 pounds working pressure of steam. The boilers are fitted with the Howden hot draft system for economical working of boilers. In this connection it might be mentioned that the sister ship Toronto, on her trials for economy, made a record as low as 1.68 pounds of coal per indicated horse-power per hour, the highest record for economy of any paddle wheel engine known.

The Kingston will be complete and ready in every detail, it is expected, to make her initial trip when the line opens for the season on June 1. It is the avowed purpose of the Richelieu & Ontario Navigation Co. to have one or possibly two more boats built after the Kingston has been given a trial.

BOARD OF SUPERVISING INSPECTORS OF STEAMBOATS MODIFY RULES FOR THE EXAMINATION OF LICENSED OFFICERS.

Capt. Alexander McKay, of Detroit, president of the Grand Lodge of the Shipmasters' Association, and Capt. Frank A. Gould, president of the Marine City Shipmasters' Lodge, were among a delegation that appeared before the Board of Supervising Inspectors of steam vessels, now holding their annual meeting in Washington, to urge a modification of the rule about re-examinations for masters' certificates. Several years ago the board made a rule that when all outstanding certificates expired, masters every five years would have to take another examination. This rule would have gone into effect late this year. The result of the conference was that the board modified it so that only masters who have not sailed for three consecutive years will have to take a re-examination to get certificates. All other masters will continue to get renewals without examinations. The compromise is satisfactory to the shipmasters' delegation.

THE LAKE FISH INDUSTRY.

The fishing business on Green Bay is being done now-a-days in a more systematic manner than it used to be, and the result is the profits and catch are larger than usual. This year the catch for spring and fall on both sides of the bay north of this city, has amounted to about 75,000 half barrels. The principal fish caught has been herring, which seems to be increasing all over the lakes, and they are considered the standard fish of these waters.

The catch of fish on Lake Erie in 1890 was 11,000,000 pounds, while in 1898, with a large addition of nets in use, there were 33,000,000 pounds secured.

Some years, it is a singular fact that when it is poor fishing on one lake it is light everywhere else on the inland seas.

The principal markets for salt fish is in New York, Virginia, Ohio, Canada, Pennsylvania and in the south. During this fall and winter Dormer & Co., of Buffalo, have purchased fully 25,000 half barrels, while Robt. Beutel, of Saginaw, has secured 12,000, and B. T. Hosking & Bro., of Chicago, about 3,000 half barrels. The money received for these fish has gone into the pockets of our fishermen and as a result, they have been well paid for their labors. The balance of the fish catch has gone into the hands of the A Booth Packing Company and others.

THE ROLLER BOAT AGAIN.

According to a Montreal dispatch, roller grain barges may shortly revolutionize traffic on the whole St. Lawrence system. Frederick A. Knapp, whose boat absorbed the scientific world when proposed several years ago, and since has been commended by several capitalists, is in Montreal after having conducted negotiations with a well-known grain handler, which, it is said, will lead to the immediate construction of an experimental fleet of the new craft.

This will be the first practical application of the principles of the roller barge successfully tested in Toronto a few years ago. The boats will be cylindrical, 255 feet long, 50 feet in diameter, and have a draft of 14 feet; or in other words, each barge will consist of concentric cylinders, the outer being a hollow, air-tight compartment to give buoyancy, the middle one containing the bunkers or compartments for freight, and the central one the platform, which is so adjusted and arranged as to be vertical always, and from which the cargo is loaded and unloaded into the spherical body of boat. The barges will have a capacity of 2,700 tons, cost $20,000 each, and can be unloaded by their own screws without extra cost. Mr. Knapp says a twenty-five horse-power engine will be sufficient to furnish all the power needed for revolving the craft.

CAPT. JOHN W. MOORE.

OBITUARY.

From a bed of pain and suffering in Lakeside hospital Capt. John W. Moore, one of the oldest and best known, as well as one of the most successful of Cleveland vesselmen, passed away Wednesday evening, Jan. 16th. He had been seriously ill but two weeks and death followed an operation at the hospital.

His career was one of the successful experiences of the lakes. A poor farmer boy with the fascination of the lake strong upon him, he ran away to become a sailor when a mere lad, and the chain of lakes was his pathway for life, making him rich far beyond the dreams of his farmer-boyhood.

John Wellington Moore was born at Avon Point 63 years ago. His father was one of the pioneers then, who came out to this country when it was almost a wilderness. John was educated in the country school until he succumbed to the fascination of the lake, close to which he was born, and ran away to be a sailor with his brother, when he was but thirteen years old. Within seven years he was the master of a schooner, the Africa, which he took charge of at the early ago of 20 years. From then on his rise in his calling was rapid. For three years he sailed the famous old boat, the Major Anderson, which was the pride of the lakes, and with which he had record trips for sailing vessels. She was built shortly after Fort Sumpter was fired upon, and was named in honor of the gallant defender of the fort. He sailed the lakes steadily until twenty years ago, and in all that time he never lost a boat and never had a misfortune on the lakes that he loved to travel.

In 1880 Capt. Moore retired from sailing and took up the vessel brokerage business. First he was a part of the firm of Pennington & Co. and later he formed the firm of Moore & Bartow, which remained in existence until about 1895, when the present firm of Hawgood & Moore was formed by Capt. Moore and W. A. Hawgood. He remained actively connected with this firm until the last. He was managing owner of the steamer J. W. Moore, named after him, also the steamers Louisiana, Siberia, Colonial, Marquette and Robert Rhodes. He owned considerable real estate and some valuable mining properties. One of his brothers was the late Capt. Smith Moore, and who was a well known resident of Cleveland for many years.

Capt. Richard Neville and Messrs. Liberty H. Ware and Myron Moore are named as administrators of the estate. Capt. Neville, who has been in charge of the steamer John W. Moore ever since she was built, will probably manage Capt. Moore's fleet.

GRAND LODGE, M. E. B. A.

The lake lodges of the Marine Engineers' Beneficial Association got two of the National officers that were elected Wednesday. The officers are George Uhler, of Philadelphia, president; Frank A. Jones, of San Francisco, vice-president; George A. Grubb, of Chicago, secretaay; A. L. Jones, of Detroit, treasurer. With one exception all the old officers were re-elected. There was a friendly contest over the selection of the members of the advisory board. The Cleveland engineers were anxious to get a local man on the board, but they did not line up enough votes and their man of course lost. Messrs. J. McG. Sterrittt, of New York, Joseph Brook, of Philadelphia, and William Schafer, of Baltimore, were elected members of the board. This evening (Thursday) all the delegates will attend the annual reception and ball given by the local lodge at the Chamber of Commerce.

ANOTHER GRAIN ELEVATOR AT SOUTH CHICAGO.

Nye, Jenks & Co. of Duluth and the Nye & Schneider Co. of Fremont, Neb., operating as the Rialto Elevator Co. of Chicago, have purchased from the Drexel estate a strip of land in South Chicago, containing a fraction less than five acres, as a site for a grain elevator. The land lies on the west side of the Calumet river and south of One Hundred and Sixth street and cost $90,000. It has a frontage of 850 feet on the slip and a width of 241 feet. The consideration includes the docking of the slip, and this work is now in progress, the slip having already been cut and dredged.

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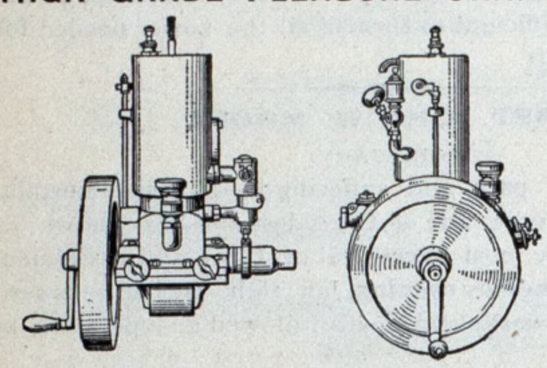

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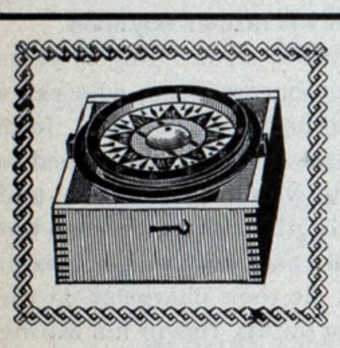

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NEW DREDGER BUILT IN GREAT BRITAIN.

Vice-Consul Nixon sends from Newcastle-on-Tyne the following description, taken from a local newspaper, of the trial trip of a new suction dredger, built on the Tyne on an American system:

TRIAL TRIP OF A NEW SUCTION DREDGER.

Yesterday, the trial trip took place on the River Tyne of the new suction dredger Hercules, which was built at the Low Walker shipyard of Messrs. Armstrong, Whitworth & Co., to the order of Mr. Lindon W. Bates, the designer, for the government of Queensland, Australia. The Hercules is quite a different type of dredger to the "bucket" dredger. They have nothing in common, except that in their different spheres of usefulness their purpose is the same—that of keeping rivers in a navigable condition.

The vessel can not be described as a handsome-looking boat. It is short and thick, and the proportionately high bows and low-lying stern and wide, towering funnel, and the queer-looking discharge pipe which projects from the stern, and the long side trail, which clings to her water line when not in use, all combine to give the vessel a strange, if not exactly an unprepossessing, appearance. But it is certainly substantial in every sense of the word, and warranted to stand any amount of wear and tear.

In more ways than one the Hercules is a remarkable craft. So far as this country is concerned, it is indeed a novelty, for it is only the third of its kind that has been constructed in an English shipyard. Both its predecessors were much smaller and less powerful dredges. They were both designed by Mr. Bates, and were also the output of the Walker shipyard. The first one left the Tyne in May last for Calcutta, and the second left last month for Rockhampton, Australia, the latter being an Australian government order. These boats, including the Hercules, have all been constructed on an American system and are technically known as hydraulic dredges, their use being to make and keep clear navigable channels in harbors and rivers, which are in constant danger of being silted up with sand or mud. The task for which the Hercules has been specially built is the important one of converting what is now a 20-foot channel into a 27-foot channel between the sea and the flourishing city of Brisbane, a distance of over 20 miles, and of maintaining the channel at that depth. In this work, the Hercules will be assisted by a still larger vessel of the same design, namely, the Samson, which is at present in course of construction at Messrs. Armstrong, Whitworth & Co.'s yard.

The Hercules, internally, is a most ingenious arrangement of mechanism and devices for dredging purposes. In the forepart of the vessel there are two large suction pipes, which pass through the bottom of the ship. These pipes can be lowered to any depth desired and can as easily be raised. On the end of each there is fixed a rotating vertical cutter, a clever device for cutting into and loosening the sand or whatever material upon which the dredger may be at work. These cutters are operated each by a 250-horsepower compound engine, and as they loosen the sand or mud, as the case may be, it is drawn into the suction pipes by a powerful contrifugal pump, driven by an engine of 1,500 horsepower.

After being sucked up in this fashion, the dredged material passes through a pipe running the length of the ship and is discharged through a discharge pipe projecting from the stern. By this means, and by the attachment of additional lengths of pipe, connected by patent joints and floated on a pontoon, which may be deflected by utilizing the discharge of water, it may be thrown to a considerable distance on either side of the channel dredged. There is, however, an alternative arrangement by which the material can be deposited on either bank of the river to a distance of 4,000 feet from the dredger. Three anchor spuds—huge bulks of timber 60 feet long and 24 inches square—two at the stern and one at the bows, passing right down through the hull of the ship, constitute no unimportant part of the gear, for these may be used to hold or pivot the dredger when the cutters are in motion. On the port side of the Hercules there is fitted what is termed a side trailer. This is also used for dredging and can be operated either in conjunction with the cutters or by itself. The side trailer has no cutter device and acts entirely by suction, promoted by the centrifugal pump, to which it is connected. It disposes of the sludge through the same medium as the bow "suckers"—that is, through the discharge pipe at the stern.

In dimensions, the Hercules is 216 feet over all, with a beam of 40 feet, and draws about 6½ feet of water when in dredging trim. The vessel was engined by the Wallsend Engineering Company, and, it is interesting to note, is fitted with four of Babcock & Wilcox's patent water-tube marine boilers. These boilers, which have been constructed in accordance with the requirements of the Bureau Veritas, have a collective heating surface of 12,080 square feet and a fire-grate surface of 332 square feet and can supply steam for 2,500 indicated horsepower when burning Queensland coal. The working pressure is 200 pounds to the square inch. They are arranged in pairs, back to back, and have two stokeholes. These four boilers necessarily form an important part of the equipment of the Hercules, for upon them devolves the responsibility for supplying power for the whole of the machinery, embracing as it does twin-screw engines for propelling the vessel at 7 knots, a triple-expansion main engine for working the centrifugal dredging pump, two sets of compound engines for working the dredging cutters, a large pair of engines for hoisting and lowering the cutters, an electric-light engine, an engine for driving the workshop machinery, and various auxiliary appliances in the engine room, steam capstan, steam steering gear, and a pair of powerful winches for working the spuds. For the enormous power generated, these boilers take up a comparatively small area of space. They also possess many other advantages, not the least of which, to avoid going into technicalities, are that steam can easily be raised in an hour from the time of lighting the fire, and that if repairs become necessary through neglect, the worst that could happen would be the overheating of a tube, which could be replaced by an ordinary mechanic at a slight cost. It is, perhaps, hardly necessary to add that during the trial yesterday the boilers gave complete satisfaction and proved a not uninteresting feature to those who were invited to inspect the vessel. This type of water-tube boiler has undoubtedly a future before it.

The trial trip, which lasted several hours, was carried out with the most gratifying results to all concerned. The most interesting of the tests was that of the centrifugal pump, which, on being set in motion, proved its wonderful capabilities and power by throwing a huge stream of water with terrific force from the end of the 33-inch discharge pipe. The capacity of this gear, it may be mentioned incidentally is equal to dredging 2,500 cubic feet of sand an hour and removing it 1,000 feet. When actually at work, the dredger will have a crew of 50 men and will be controlled throughout by one man from an operating room on the upper deck, by means of levers, telegraphs, electric bells, whistles, and telephones. Complex as is this arrangement, it can be worked with the greatest ease imaginable.

Winter Moorings A small book of about 32 pages, containing alphabetically arranged lists of steam and sail vessels, also tugs, showing where each one is located for the winter. This little booklet may be had by enclosing 10 cents in stamps to

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THE sum of $36,450 has been awarded by the Admiralty Court to the owners of the British steamer Cluden, now on her way to Galveston, for salving the Red Star liner Friesland, last November.

TO PROTECT MINNESOTA POINT.

The following letter from J. W. Reynolds in relation to the recession of the shore line of Minnesota Point, was received by the Duluth board of public works a few days ago. The board referred the communication to the council and approved the suggestion made. The letter says:

What is now proving a source of some trouble to our citizens, promises shortly to be the city's source of greatest attraction to visitors. Minnesota Point, below the canal the former city of Duluth and the old village of Park Point, valuable now only as a protection to the harbor, is destined to become the great summer resort and sanitarium of the lakes. Projected far out from the shore into the cool waters of Lake Superior, the pure air of the place is in itself a balm that heals and prevents pulmonary and kindred diseases, and assures certain relief to the prevalent complaints, hay fever and asthma.

The Point is covered with a fine growth of pine and other trees. which are as indispensable to its usefulness as a wind break and protection to the harbor, as they are to its beauty and healthfulness as a resort.

Thirty years ago the Point was, on the average, about 20 rods wider than it is now. It has lost nothing on the lake side, but the shore line on the bay side has steadily receded until in many places the Point is not more than about 10 rods wide.

The result, without interference, is not difficult to foresee; in a few years the trees will be gone and the waters of the harbor and lake will commingle without passing through the canals.

This summer the recession of the shore line has been more marked. It is from five to fifteen feet farther landward than last year, and in some places, at times of high water, nearly half of the width of the point is overflowed. Hundreds of trees of all sizes have been undermined and washed away on the bay side, and still greater destruction is imminent during the coming winter and summer.

The causes of the changes of the shore line are apparently:

1. Primarily the construction of the Duluth canal, which permits the water to be heaped up in the bay in winter and summer by the lake winds, often causing a rise of over a foot in a few hours, so that the banks are undermined and washed away.

2. The diversion of the St. Louis river to the Duluth canal, by which the deposits of debris which made the Point are no longer left there, but are carried out into the lake.

3. The expansion of the ice in the bay, which heaves up the shore with trees and all. The great expansion is also caused by the Duluth canal, principally, and the Superior entry to some extent, which permits the northeast winds to drive the water from the lake into the bay, cracking the ice, which freezes again, expanding each time more and more.

My idea of the remedy is a tight and substantial breakwater on the bay side from the Duluth canal to the natural entry, constructed at about high water level a few rods from the shore. Such a breakwater would catch and retain the debris which storms would carry over it, and would, before long, make land between it and the shore.

These suggestions are respectfully offered, as I promised some time ago, that measures may be taken by the proper authorities to preserve Duluth's incomparable harbor and her greatest attraction, the famous pleasure grounds of Park Point.

Major C. B. Sears, United States Engineer in charge of improvements on Lake Superior, was asked as to the statements made by Mr. Reynolds, and was inclined to take but little stock in it. "In the first place," said the major, "a comparison of the maps of the Point years ago and the present, will show that the strip of land is really wider now than at that time. There have been some changes in the shore line, however, within the past year or two, but it is due to the unusually high water. Lake Superior is higher now than in many years, and this would naturally cut off the shore here and there. Of course there are points where eddies might form and eat into the bank, so to speak, and they have to be guarded against.

"As far as the Duluth ship canal being primarily responsible for the recession referred to, is concerned, Mr. Reynolds is mistaken. A heavy west or southwest wind will fill the bay twice as quickly as when there was only the natural entry, but the water will also be discharged as quickly. The current in the canal runs both in and out, the changes being due to the oscillations of the lake.

"There is no present necessity for the construction of a "breakwater" the entire length of the Point, although it might do no harm if the riparian owners, who think their property is threatened, built one themselves to protect their own particular lot.

"We have been investigating this matter, however, and you may rest assured that if there is any intimation of danger the government will see that the Point is protected."

VESSELS ENROLLED AT DULUTH.

The report of the Duluth customs office for the quarter ended Dec. 31, 1900, which was completed Saturday, shows that the port of Duluth had 302 vessels enrolled at the close of the year, with a total gross tonnage of 347,136 tons and net tonnage of 284,474 tons.

This is an increase during the year 1900 of eighty-two vessels, the greatest in the history of the remarkable growth at this port.

What that growth has been can be better appreciated when it is remembered that Dec. 31, 1891, ten years ago, the total number of vessels registered in Duluth was thirty-four. The growth has been steady since that time, but particularly so since 1895, when the legislature lowered the tax on that form of property very materially, bringing it down to 3 cents on each ton of registered net tonnage.

Another remarkable and striking feature of a comparison of the reports of the various years is the great increase in the size of lake boats. In 1891 the average net tonnage of the thirty-four boats enrolled there that year was 23.67 tons. Dec. 31 of last year the average net tonnage of the 302 boats enrolled is 942. In other words, the total net tonnage of the entire thirty-four boats enrolled at the port in 1891, was 138 tons less than the average net tonnage of just one of the big freighters enrolled there at the beginning of the year.

THE Carnegie Steel Company has received the contracts for furnishing the steel plates and shapes for the three battle ships now under construction—the Maine, Missouri and Ohio. Most of the steel for the six monitors that are being built will also be made by the Pittsburg concern. The three battle ships will require 8,000,000 pounds of ship plates and 3,000,000 pounds of shapes, mostly in plates, but cut to unusual sizes, making a total of 11,000,000 pounds that the three will need, exclusive of the armor plate. The contracts have been placed with the Carnegie Company by the Cramp Ship-building Company and the Newport News Shipbuilding Company, which have the vessel contracts.

AN American professor who returned from Europe reports that efforts to exclude fruits from this country have been abandoned in Holland. The fruit is sold at auction; one barrel in every ten is emptied upon the floor and the sale is thereby determined. The American fruit exhibited at Paris surpassed those of other countries and the French dealers were greatly interested in these fruits. The prospect is for a much larger demand in the future. The opening of cheaper transportation from Lake Erie to Europe by the improvement of the Canadian canal will benefit the farmers of Northwestern Ohio. Good, long keeping apples generally bring fair prices and are much superior as a healthful food to the banana which is vastly overrated in regard to the amount of nutriment it contains.

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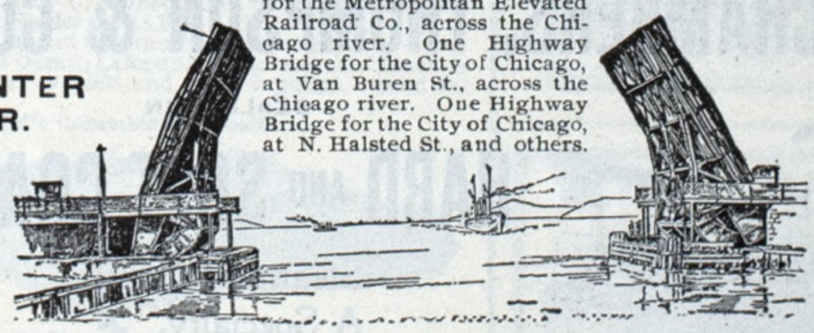

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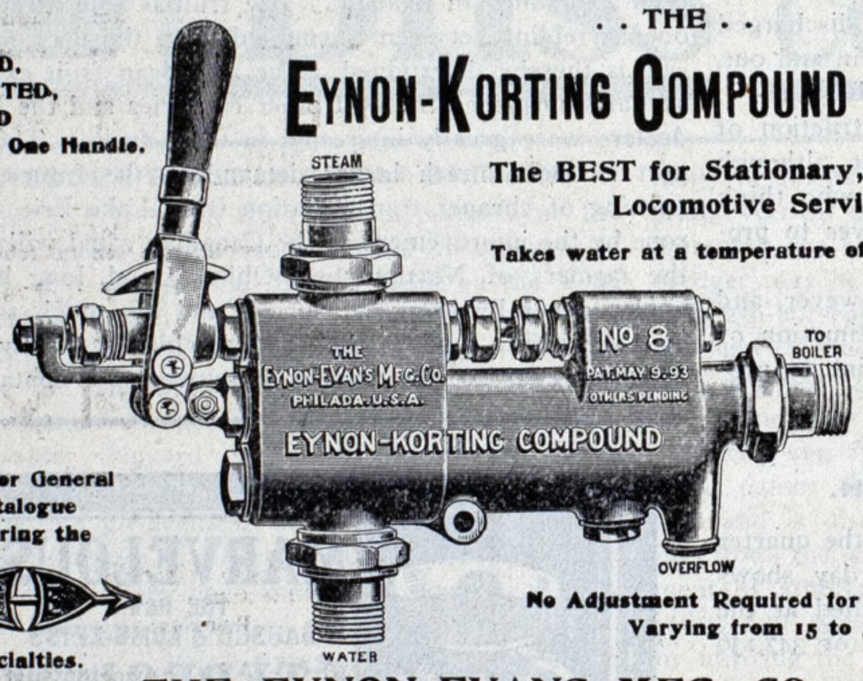

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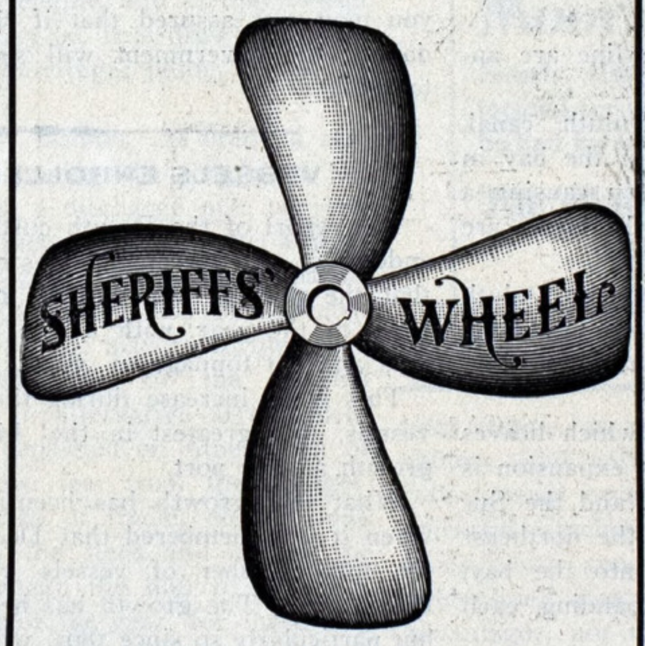

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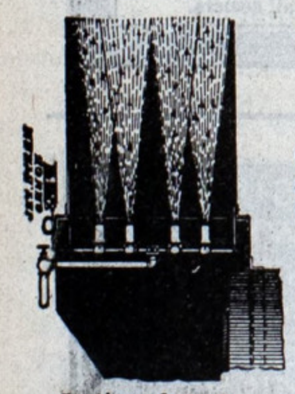

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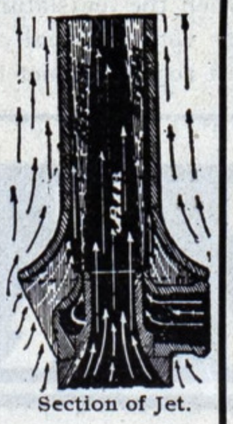

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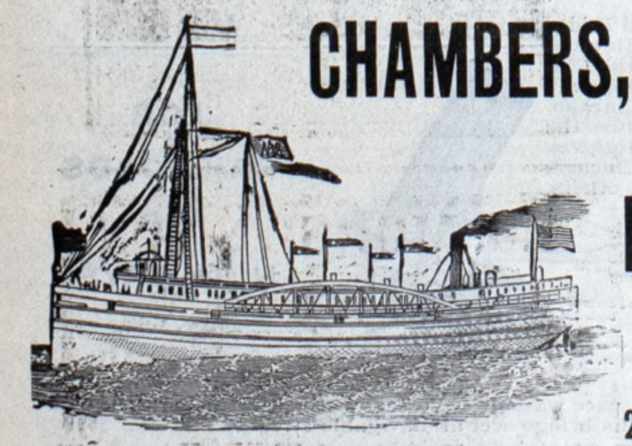

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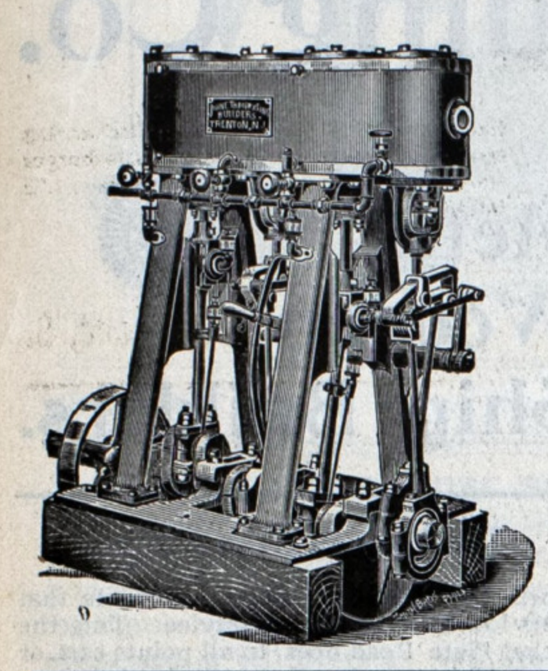

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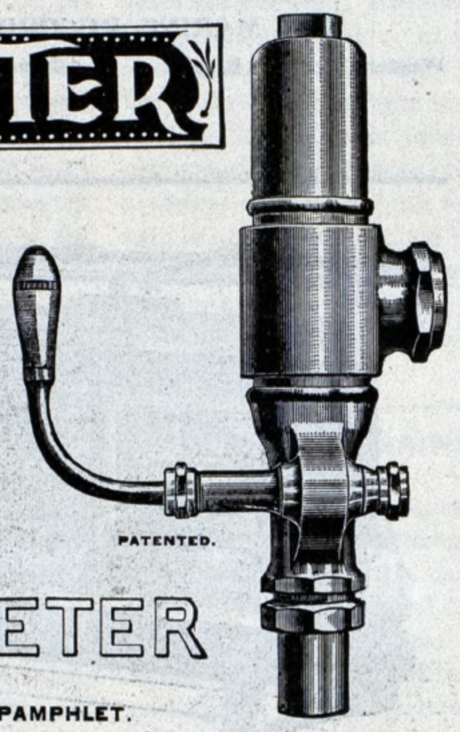

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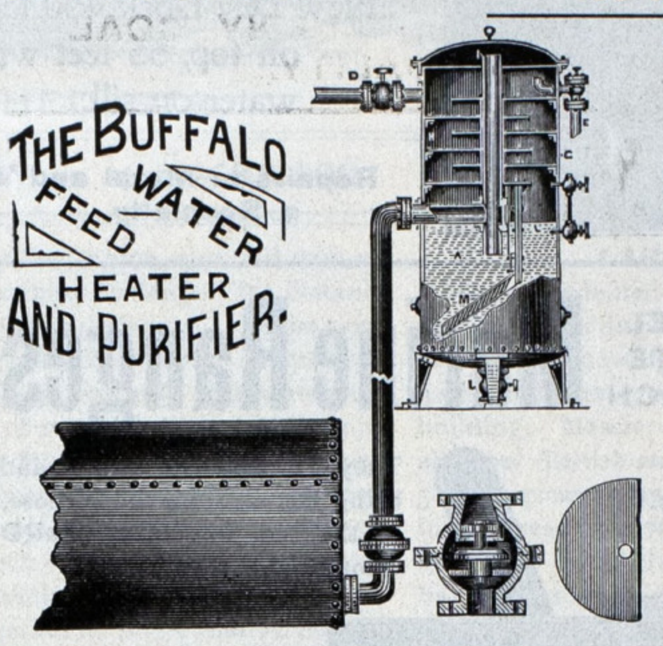

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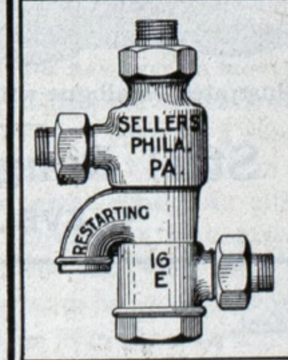

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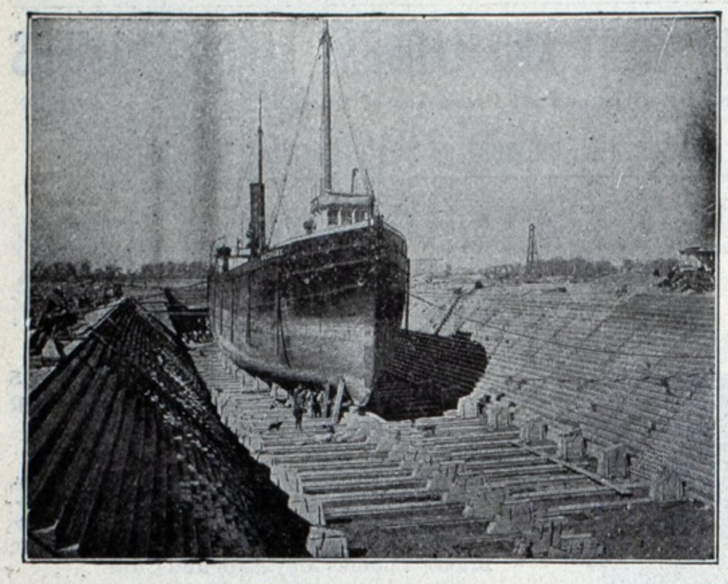

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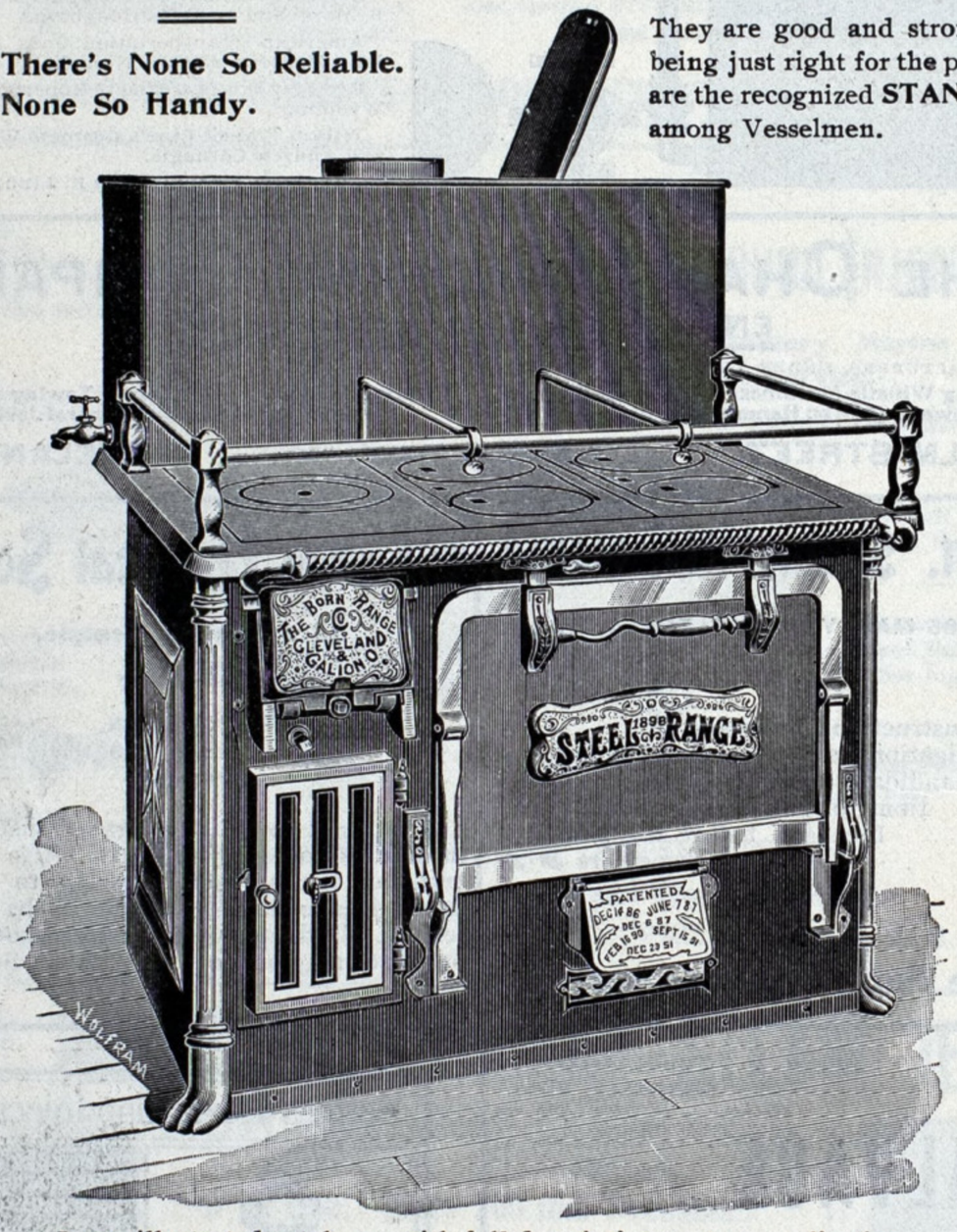

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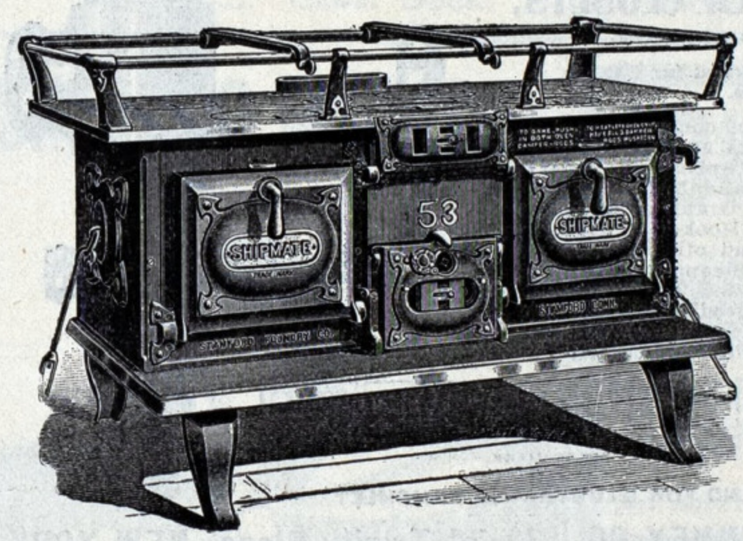

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